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ABSTRACT

This guide aims to document the resources available to educators who work with struggling secondary readers--readers who struggle in general education and reading classes, grades 6 through 12. With the goal of building a guide to resources, the scholarly literature was reviewed to determine: (1) current theoretical perspectives and research findings on building reading proficiency at the secondary level; and (2) their implications for classroom instruction. Rather than reporting all the factors that can impact secondary-level reading proficiency, the guide presents factors for which a research base establishes essential importance and for which there are pedagogical implications. It identifies and describes programs and strategies that aligned with those findings. The guide is divided into the following parts: Introduction: (How To Use the Guide; How Resources Were Selected); Part 1: Perspectives (Struggling Secondary Readers: A Closer Look; Informal Assessment; Building Reading Proficiency at the Secondary Level; Principles of Effective Reading Instruction; Principles of Effective Professional Development); Part 2: Resources (Five Questions Organize the Programs and Strategies; Programs; Strategies; Definitions of Terms); and Part 3: Procedures for Compiling the Guide. (Contains a 164-item bibliography.) (NKA)

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INTRODUCTION

BUILDING READING PROFICIENCY AT THE SECONDARY LEVEL

A Guide to Resources

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INTRODUCTION

We set out to document the resources available to educators who work with struggling secondary readers. These readers struggle in general education and reading classes, grades six through twelve. Some are students with mild disabilities, classified as learning disabled, for whom regular classroom teachers have instructional responsibility. Some are students whose culture or language differ from the culture of the classroom. Many are students who have become skilled evaders of reading, who know the stress of not being able to read successfully.

By the secondary grades, students are presumed to have acquired basic reading skill. Over the last decade, researchers and policymakers have all but abandoned attention to secondary-level remediation to focus on preventing the need for it. Unfortunately, the need remains. The need for a new look at adolescent literacy was the focus of a recent position statement of the International Reading Association (Moore, Bean, Birdyshaw, & Rycik, 1999). Our project, initiated by the Southwest Educational Development Laboratory (SEDL), was prompted by requests from secondary educators for tools to support their students who struggle with print in the classroom. Its purpose is to establish what we know and to describe what is currently available.

With the goal of building a guide to resources, we reviewed the scholarly literature to determine: (a) current theoretical perspectives and research findings on building reading proficiency at the secondary level and (b) their implications for classroom instruction. Rather than reporting all the factors that can impact secondary-level reading proficiency, we present those for which a research base establishes essential importance and for which there are pedagogical implications. We identified and described programs and strategies that aligned with those findings.

HOW TO USE THE GUIDE

Part I

Part I provides background information on building reading proficiency at the secondary level.

Struggling Secondary Readers: A Closer Look describes the scope of the problem and the consequences of being a struggling secondary reader.

Informal Assessment provides an overview of common reading behaviors of struggling secondary readers, with specific suggestions for informal assessment that teachers can use.

Building Reading Proficiency at the Secondary Level is a synthesis of the theory and research on secondary reading around four major factors for building reading proficiency.

Principles of Effective Reading Instruction characterizes effective instructional practices for developing the reading of struggling secondary readers.

Principles of Effective Professional Development outlines four tenets of effective professional development for teachers who are implementing new strategies.

Part II

Part II provides detailed descriptions of some of the resources available for teachers to use with struggling secondary readers. The instructional resources for struggling secondary readers were broadly categorized as programs and strategies.

Programs are instructional packages of multiple components prepared by an entity, often commercial. They provide materials, instructional routines, and support for the professional development of teachers. Two types of programs were defined:

- *Campus programs* require an administrative commitment at the district, campus, or department level for implementation across classrooms.
- *Classroom programs* are designed to be selected and implemented by individual classroom teachers.

Strategies are consistent plans, consciously adapted and monitored by readers for improving performance in reading. Two types of strategies were defined:

- *Teacher strategies* are implemented by teachers to develop student reading ability. They are instructional interventions for the whole class, small groups, or the individual student.
- *Student strategies* are internal procedures used by students in the process of reading. Students assume responsibility for using strategies as they become independent readers.

Organization of Entries

Each entry begins with a table that allows a quick review of essential information about the resource. The body of the entry is organized to address the following five questions. The factors and principles we found in our research overview are listed in brackets.

1. What is it? How does it work?

2. What professional development is required? What is provided?
   [Four principles of effective professional development: continuous and sustained, locally based initiatives, adaptation rather than adoption, teacher as researcher].
   See pages 19–20 for the discussion of principles.

3. How does it develop reading proficiency?
   [Four major factors: motivation, decoding

skill (including fluency), language comprehension (including linguistic knowledge, background knowledge, making inferences, self-regulated comprehending), and transaction with text]. See pages 9–17 for the discussion of factors.

4. How does it support effective reading instruction?
   [Eight principles of effective reading instruction: recognition and honor of cultural and linguistic diversity; assessment during teaching; scaffolds (strategies such as questioning, discussion, and writing) before, during, and after reading; repertoires of strategies; explicit instruction of strategies; reading practice; student choice and authentic tasks; scaffolding across the classroom curriculum]. See pages 17–19 for the discussion of principles.

5. How effective is it?
   [Type of documentation, recency of documentation, effectiveness with the target population, extent of implementation]. See pages 4–5 for the discussion of criteria.

Definitions of Terms.

A definition for each term used in the resource descriptions begins on pages 133. This section is organized by the five questions used to organize the resource entries.

Part III

Part III of the *Guide* explains the procedures used for reviewing the research on secondary reading, for developing the selection criteria, and for locating and describing resources.

Bibliography

The bibliography includes the sources consulted for the preparation of the guide. It also includes recent publications of practical value to educators, marked with an asterisk(*). Sources consulted to document each of the programs and strategies are listed separately, in reference lists at the end of each resource description.

Project Web Page

In addition to this printed *Guide*, the project is supported by a Web page at http://www.sedl.org/.

The Web page features a database by which users can search and sort for specific information and compare resources. For example, to see what is available to build background knowledge, the user can sort on that field.

HOW RESOURCES WERE SELECTED

Criteria for Inclusion of Programs and Strategies

Programs and strategies were included in the *Guide* if aligned with the following criteria:

1. Developmentally, contextually, and socially appropriate for improving the reading of struggling secondary readers, grades 6–12.

2. Grounded in reading theory and consistent with principles of effective reading instruction. Programs also had to be consistent with principles of effective professional development of teachers.

3. Documented to be effective based on quantitative or qualitative data reported in scholarly, refereed publications. Programs could instead be documented by a formal program evaluation.

Explanation of the Selection Criteria

1. Developmentally, contextually, and socially appropriate for improving the reading of struggling secondary readers, grades 6–12.

Here secondary is defined as grades six through twelve, the most common grade span for middle/junior high and senior high schools. Adolescents in these years have unique cognitive, social, and personal needs. Interventions designed for elementary readers may not provide sufficient challenge to prepare secondary students to be successful in their classrooms. Interventions designed for postsecondary students or for the workplace may not be appropriate for the personal or social needs of secondary readers. Therefore we selected resources that could support the secondary content classroom and respect the adolescent's need for social interaction and personal identity. We selected programs that had been developed for secondary populations and did not simply repackage materials written for younger or older readers.

2. Grounded in reading theory and consistent with principles of effective reading instruction. Programs also had to be consistent with principles of effective professional development of teachers.

We reviewed the research literature on secondary reading proficiency from multiple perspectives, including the cognitive and sociocultural, and organized the findings around four needs:

- *Motivation to Read* (specifically, intrinsic motivation to persist in a reading task);
- *Decoding Skill* (which includes basic decoding skill and fluency);
- *Language Comprehension* (which includes linguistic knowledge, background knowledge, making inferences, and self-regulated comprehending); and
- *Transacting with Text* (engaging in a dialog with the text, especially in making personal connections)

We addressed each need from the perspective of culturally and linguistically diverse learners.

From the research literature on effective reading instruction, we found evidence for the following principles:

- *Recognition and Honor of Cultural and Linguistic Diversity*
- *Assessment During Teaching*
- *Scaffolds Before, During and After Reading*
- *Repertoires of Strategies*
- *Explicit Instruction of Strategies*
- *Reading Practice*
- *Student Choice and Authentic Tasks*
- *Scaffolding Across the Classroom Curriculum*

From the literature on principles of effective professional development of teachers, we found evidence for the following factors:

- *Continuous and Sustained Learning*
- *Locally Based Initiatives*
- *Adaptation Rather than Adoption of Programs*
- *Teacher as Researcher*

A detailed explanation of these factors begins on page 9.

3. Documented to be effective based on quantitative or qualitative data reported in scholarly, refereed publications. Programs could instead be documented by a formal program evaluation.

Some programs or strategies may have been overlooked or, if new, not included due to the lack of documentation of effectiveness. They can be added as the *Guide* is updated. For detailed information on how the criteria were developed and applied, see page 133.

Rating of Resources for Building Secondary Reading Proficiency Based on Level of Support and Implementation

	LEVEL OF SUPPORT AND IMPLEMENTATION			
Criterion	**Well established**	**Established**	**Promising**	**Insufficient Evidence**
Type of documentation	Documentation with both quantitative and qualitative data from three or more sources, including: Peer-reviewed publication, not written by the developer; Developer-sponsored program evaluation; and Independent program evaluation.	Documentation with quantitative or qualitative data from two or more sources, including: Peer-reviewed publication; Developer-sponsored program evaluation; and/or Independent program evaluation.	Documentation with quantitative or qualitative data from at least one source, including: Peer-reviewed publication or Developer-sponsored program evaluation.	Quantitative or qualitative data has been collected and made available by the developer but no program evaluation has been conducted. Non-peer-reviewed publication.
Recency of documentation	Documentation has been established over an extended period of time, including the last 5 years.	Documentation over the last 10 years, but not in the last 5 years.	Documentation only in the last 3 years.	No documentation in the last 10 years.
Effectiveness with target population	Documented effectiveness with varied populations of struggling secondary readers.	Documented effectiveness with 1-2 populations of struggling secondary readers.	Documented effectiveness with other populations of readers but only anecdotal evidence with struggling secondary readers.	Anecdotal effectiveness with struggling secondary readers or other readers.
Extent of implementation	Implemented in at least 5 sites beyond a pilot.	Implemented in 3–4 sites beyond a pilot.	Implemented in 1–2 sites beyond a pilot.	Implemented in a pilot.

PART I: PERSPECTIVES

STRUGGLING SECONDARY READERS: A CLOSER LOOK

For secondary-level students in grades seven through twelve, the social and economic consequences of not reading well can be cumulative and profound: the failure to attain a high school diploma, a barrier to higher education, underemployment or unemployment, and difficulty in managing personal and family life. Years of failing at what is deemed a hallmark of intelligence and worth can also leave struggling readers with emotional consequences, such as anxiety and low self-esteem, that affect personality and interpersonal relationships. These effects within and beyond the classroom walls show that by the secondary grades educators can no longer defer solutions to future development or instruction.

The Scope of the Problem

While many readers make gains through grade 8, many then fall behind from grades 8 to 12. The National Assessment of Educational Progress (NAEP), which provides longitudinal achievement data for students through grade 12, showed slight increases from 1994 to 1998 in reading performance across grade levels. Still, more than 26% of students at grade 8 and 23% of those who had not left school at grade 12 failed to reach "Basic Proficiency" in reading, meaning they lacked even the "partial knowledge and skills" that are fundamental for their grade level. As with prior test administrations, a disproportional number of students in culturally and linguistically diverse (CLD), English as a Second Language (ESL) and low-income populations fell below Basic Level proficiency at both grades 8 and 12 (Donahue, Voelkl, Campbell, & Mazzeo, 1999).

National longitudinal studies show that approximately 75% of those with reading problems in third grade still experience reading difficulties in the ninth grade (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher 1996; Shaywitz, Holahan, & Shaywitz, 1992). Students who experience reading difficulties in the early grades often suffer what has been called the "Matthew Effect" (Stanovich, 1986), a gap between good and poor readers that widens through the grades. Mikulecky (1990), for example, found that a group of secondary students two or more years behind their peers in reading ability were differentially affected by their tendency to avoid reading. These students read very little during or outside of school. Over the two-year period of the study, their reading comprehension performance actually declined.

Consequences of Being a Struggling Reader

By the secondary grades, struggling readers have little confidence in their ability to succeed in reading and little sense of themselves as readers (Collins, 1996). Guthrie, Alao, and Rinehart (1997) noted an "eroding sense of confidence" in these students. They are acutely aware of their reading problems (Wigfield & Eccles, 1994) and likely to suffer serious psychological consequences, including anxiety, low motivation for learning, and lack of self-efficacy.

Emotional and Psychological Consequences

Many struggling secondary readers experience social anxiety from reading aloud in the classroom (Kos, 1991) and from repeated assignment to remedial reading programs (Collins, 1996). Their personal anxiety is associated with fears of lacking functional skills and of attaining future employment or success (Amman & Mittelsteadt, 1987; Kos, 1991).

To save face, they may attribute their reading failure to such external factors as task difficulty, noise, interference, and unfair teachers. Yet what may be regarded as inappropriate attributions may be appropriate for instruction that is not meaningful, relevant, or at the readers' instructional level. For struggling readers who attribute failure to their own lack of ability, further effort is seen as futile, which damages the trust between student and teacher (Wallace, 1995).

Behavioral Consequences

Although a relationship between reading difficulties and problem behavior has been well documented (Kos, 1991; McGee, Share, Moffitt, Williams, & Silva, 1988), the nature of that relationship is unclear. In a longitudinal study of New Zealand children with reading disabilities through age 13, McGee, et al. (1988) found behavior problems to be a result of reading difficulties rather than a cause. Others (Fergusson & Lynskey, 1997) have found no relationship, and specifically no relationship with hyperactivity (Chadwick, Taylor, E. Taylor, A. Heptinstall, & Danckaerts, 1999).

In summary, struggling secondary readers are characterized by the consequences of years of reading failure. Gaskins (1997) notes that these consequences may be suffered even by those students who are reading at grade level after successful remediation.

INFORMAL ASSESSMENT

Teachers usually can distinguish students who struggle with reading from those who are proficient by observing and noting reading behaviors. These behaviors may be evident through the course of the reading and will be determined by the nature of the student's reading difficulty as well as the content and context of the reading task.

Formal group assessments (such as standardized achievement tests and state competency tests) can flag problems; individual assessments (such as the diagnostic tests used for determining qualification for special education services) can provide valuable information. Yet this formal assessment provides an incomplete view of student literacy abilities and should be accompanied by informal assessment, by which teachers observe student reading on a range of reading tasks and in multiple contexts. For example, a student's oral responses to peers about a reading can indicate level of engagement as well as partial understandings.

Common Reading Behaviors

Teachers should informally assess students who demonstrate poor pre-, peri-, and post-reading behaviors, even without a flag from formal assessment. Such assessment can be as simple as the teacher having the student read aloud in a private meeting or on tape. Students who decode the first few letters and then guess the rest of the word may have an implicit theory that reading is a search for sight words with gaps filled in by background knowledge (Johnston, 1985). Those who overrely on context may do so because of poor decoding skills. Some may read aloud quite slowly and disjointedly, or rapidly but inaccurately. Others may read methodically, but accurately, without attempting to comprehend. To determine the reasons for these reading behaviors, teachers can ask students to "think aloud" and explain how they decoded a word or how they comprehended. Comprehension can be checked by asking students to retell what they have read. Students who see reading as an oral performance may be unconcerned about the lack of correspondence between what they say and what is on the page.

When presented with a reading task, struggling readers, having experienced repeated difficulties in reading, may be more concerned with avoiding embarrassment or "saving face." As a result, they may seek ways to avoid the assignment, including distracting attention away from reading. They may disengage from the reading task by feigning interest, bringing home the wrong book, reading the wrong pages, and procrastinating (Paris, Wasik, & Turner, 1991). Disengaged, they may rush to complete the assignment rather than taking even more time to connect with the text.

Struggling readers typically fail to evaluate their understanding or apply strategies for adjusting their comprehending to different texts and purposes (Paris et al., 1991). For them, reading is what occurs when the eyes meet print (Pressley & Wharton-McDonald, 1997). Poor decoders typically have little cognitive energy left for strategic comprehension. Those with limited background knowledge will be unable to make and update predictions and connect ideas. Struggling readers stall at this "during reading" stage, while engaged readers continue processing after reading by reskimming to cull important ideas and reflecting on the meaning. Engaged readers also demonstrate passion for certain ideas in the text. Struggling readers who spend much effort for little return are less likely to find value or to assume what Rosenblatt (1978) has called an aesthetic stance. Especially at the high school level, struggling readers may find little in remedial reading materials to engage their passions.

Assessment of Second Language Learners

Bilingual programs are rare for secondary students who are acquiring proficiency in English, despite the fact that many new arrivals are adolescents (Valdes, 1998). They may attend a class for English language instruction, but are expected to function most of the day in classrooms that expose them to native levels of English, with little, if any, modification for their level of English proficiency. Important differences among these students can explain their difficulty in reading English. Some may have a low level of oral comprehension of English, but comprehend in reading in their native language. Some may have difficulty decoding an alphabetic language. Those who are able to decode in their native language (L1) will be better able to decode English than those who have no decoding skill in any language. For example, the student who can decode fluently in an alphabetic language such as Spanish should not be given the same instruction as the student who does not understand the alphabetic principle.

For such students, three common practices limit their development of English reading proficiency: (a) a separate track for English language learners, which offers few opportunities for them to interact with native English speakers; (b) the classroom that only allows English, excluding and stigmatizing the participation of those who are not fluent (Valdes, 1998); and (c) the inappropriate labeling of second language learners as learning disabled or referrals to special education (Garcia & Ortiz, 1988) where they receive simplified content-area instruction.

Several informal reading inventories and interview protocols are available for classroom teachers to help teachers informally assess the reading of their students.

Informal Reading Inventories and Interviews Appropriate for Older Students

Inventories are administered one-on-one. Note that assessments of oral reading probably will not be valid for students who are still learning the pronunciation of English. Their mispronunciations should not be interpreted as evidence of decoding problems.

- *Flynt-Cooter Reading Inventory for the Classroom,* (1995), 2d ed., by E. S. Flynt and R. B. Cooter, Gorsuch Scarisbrick.

This inventory can be used with students through grade 12. It includes an interest/attitude interview.

- *Bader Reading and Language Inventory,* (1994), by L. A. Bader, Longman.
- *Spelling Inventories,* in D. R. Bear, M. Invernizzi, S. Templeton, and F. Johnston, *Words Their Way,* (2000), Merrill.

These upper-level and content-specific spelling inventories provide diagnostic information on the type orthographic knowledge that a reader is using to process a word.

- *Content Area Reading Inventory (CARI),* in R. Vacca & J. Vacca, *Content Area Reading,* (1999), Harper-Collins.

The CARI is a way for teachers to construct a quick comprehension assessment on a selection of the course textbook in order to determine who among their students will be struggling with the assigned reading.

- *MPRI: The Major Point Interview for Readers.* In E. Keene and S. Zimmermann, (1997). *Mosaic of Thought: Teaching Comprehension in a Reader's Workshop.* Heinemann, pp. 228–235.

BUILDING READING PROFICIENCY

Research Perspectives

Secondary-level reading remediation traditionally has not focused on decoding, but on comprehension. Readers complete instruction and practice on those skills for which they scored pretest deficiencies. Usually, they improve on a closely aligned posttest. Despite short-term gains, the effects of even the strongest of these approaches, mastery learning, are effectively zero on such transfer measures as standardized tests (Kulik, Kulik, & Bangert-Drowns, 1990; Slavin, 1990). Mastery learning through computer-assisted-instruction also has shown minimal effects for reading (Christmann, Baggett, & Lucking, 1997; Fletcher-Flinn & Gravvat, 1995) or for transfer to contexts beyond the computer program (Read, 1992). Some researchers (such as Gaskins, 1998) have observed that struggling readers need support in strategic reading, in orchestrating comprehension, and in applying reading across contexts—forms of support remedial programs usually lack.

Another traditional approach has been the modification of instruction based on assessment of learning style. Here, too, meta-analyses (of aptitude-treatment-interaction studies) have failed to establish an effect (Kavale & Forness, 1987). Recently, Stahl and Kuhn (1995) found no support for learning styles applied to reading instruction and Horton and Oakland (1997), in an empirical study of 417 seventh graders, found no support for the practice of adapting instruction to learning styles.

A consensus seems to be building among researchers that traditional reading remediation is insufficient. In their comprehensive review of the literature, Johnston and Allington (1991) concluded that remediation for reading comprehension beyond the primary grades generally has not been very effective in improving student reading performance. In their review, Klenk and Kibby (2000) concurred, calling for an end to the "remedy" metaphor. Instead, they proposed "mediational process" for both teachers and students (p. 681). Such an approach supports the Vygotskian notion of recursive zones of proximal development and the added consideration of reading contexts outside of school—such as home, church, and workplace—that are important for older readers. For example, Moll, Amanti, Neff, & Gonzalez (1992) documented the patterns of literacy learning and expertise, called "funds of knowledge," that working class, Mexican-American students bring to school. Typically these funds of student knowledge, stemming from family and home (Delgado-Gaitan, 1990) as well as church and workplace, have been unrecognized assets of those marginalized from the culture of school. In Moll's approach, teachers become ethnographers to learn about those funds, which are then integrated with classroom reading. Another example of culturally relevant pedagogy is in the work of Ladson-Billings (1994, 1995), who reported how this approach has helped African-American students to see the power of literacy in their lives.

An "engagement perspective" guides our review of building reading proficiency at the secondary level. The National Reading Research Center (Baumann & Duffy, 1997; Cramer & Castle, 1994; O'Brien, Dillon, Wellinski, Springs, & Stith, 1997) articulated this perspective, noting that engaged readers "coordinate their strategies and knowledge (cognition) within a community of literacy (social) in order to fulfill their personal goals, desires, and intentions (motivation)" (Guthrie & Wigfield, 2000, p. 404).

In the following sections we summarize the research on what struggling secondary readers need in order to build reading proficiency. The discussion is organized around four factors: (a) the motivation to read, (b) the ability to decode print, (c) the ability to comprehend language, and (c) the ability to transact with text (to actively seek information and make personal responses). For each factor, we address appropriate learning contexts and the implications for culturally and linguistically diverse learners.

Motivation to Read

Reading proficiency requires the reader to independently begin and persist in reading tasks, actions that hinge on motivation (Snow, Burns, & Griffin, 1998). As students move through the grades, especially at the middle school level, their motivation to choose to read tends to decline (Donahue et al., 1999; Guthrie & Wigfield, 2000).

Feelings of competence and self-determination engendered by a reading task likely affects the reader's intrinsic motivation for it (Deci & Ryan, 1985). In a study of four struggling middle school readers, Kos (1991) found that despite expressing strong desires to read successfully, these students had negative views of reading in school settings, which they associated with feelings of failure. By the secondary grades, they readily recognized the simplified text that has been written for their remediation and associated such materials with failure and social stigma. Authentic texts (such as newspapers and trade books) and choice in selecting reading materials are especially important for fostering reading persistence in struggling secondary readers (Cope, 1993; Worthy, 1996). Instructional scaffolding for choosing authentic materials has also improved reading interest and skill among these students (Ammann & Mittelsteadt, 1987; Collins, 1996; Ryan & Brewer, 1990).

One approach to motivating struggling readers, about which educators disagree, has been to develop reading behavior through positive reinforcement. Rewards for reading, such as prizes and points, were found to lead to reading avoidance and the use of weak strategies (Guthrie et al., 1997; McQuillan, 1997; Taylor, 1999). Generally intrinsic motivation is enhanced through verbal praise and positive feedback and is undermined when rewards are tied to task completion rather than levels of performance (Cameron & Pierce, 1994).

Affect

Intrinsically motivated readers persist in reading because of affective engagement, the pleasure or satisfaction that is gained from their value or interest in the task (Baumann & Duffy, 1997). In avoiding reading, the struggling reader has little opportunity for potentially motivating connections of emotions, feelings, and sentiments of transacting with text. Even secondary students who are competent readers may avoid reading unless it is required when they fail to see it as useful or interesting to them (O'Brien et al., 1997).

Contexts for Building Motivation

A classroom climate of respect for peers and for cultural and linguistic differences provides a motivating social context for learning through reading. Cummins (1986) noted that students suffered in reading performance when their language or dialect was stigmatized in the classroom, but not when it was honored. The teacher who is aware of literacy contexts outside the classroom can connect those contexts to reading tasks and the selection of materials. In structuring reading tasks and selecting materials, teachers should allow student choice, while providing support in making those choices.

The next two factors are the major cognitive components necessary for proficient reading: decoding and language comprehension.

Decoding Skill

Decoding skill involves basic decoding as well as fluency. Most educators assume that by the secondary grades, all but those students classified as learning disabled (or dyslexic) are skilled decoders. Consequently, relatively little research has looked at decoding skill with other populations of secondary readers.

Basic Decoding

Basic decoding skill requires readers to know the systematic sound-symbol relationships of English, as well as words that don't entirely follow those rules ("mischief")and words that are linguistically unique ("colonel"). By the secondary grades, even struggling readers have acquired (through print exposure) a store of words they recognize by sight. Yet most of their reading words will be "exception words" unless they are skilled in manipulating the sound-symbol system to see relationships among words in print and with spoken words they already know (Johnston, 1985). For second language learners the "exception words" can be particularly difficult, as applying first language cognates or English rule regularity doesn't help much.

Basic decoding skill depends upon abilities native speakers of English are presumed to have acquired by the secondary grades. The first is the ability to recognize and manipulate letters of the alphabet. The second, phonemic awareness, refers to consciously recognizing the separability of phonemes (abstract units that underlie the sounds of spoken language) and, just as important, the ability to manipulate them. Although the importance of phonemic awareness has been established with younger readers, it has proven difficult to measure in expert older readers (Scarborough, 1998). However, readers who are dyslexic show a clear deficit in decoding at the level of phonemes that persists into adulthood (Fawcett & Nicolson, 1995; Shaywitz, 1996). Defining the problem for struggling secondary readers requires more careful investigation. In a study of struggling high school readers, Shankweiler, Lundquist, Dreyer, & Dickinson (1996) found that differences in phonological processing efficiency accounted for individual differences in text comprehension. These readers could map phonemes with graphemes. Their difficulty was in segmenting the morphological (meaning) derivations of words, even when the words were in their listening vocabularies.

This ability to look within the printed word, gained through experience with both written and spoken language, helps the reader to decode unfamiliar and irregularly spelled words. The English spelling system, contrary to popular belief, is not unsystematic; its consistencies are recognized by proficient readers. Spelling ability contributes to word recognition and, indirectly, to comprehension (Stanovich & Cunningham, 1993). It proceeds developmentally from alphabetic spelling to within-word patterns, to (at the secondary level) spelling based on meaning. All readers, including those with learning disabilities, seem to follow a similar pattern of development, with struggling readers stalling at the within-word pattern stage (Templeton & Morris, 2000).

Fluency

Fluency represents a level of speed and accuracy of word recognition and it improves from reading practice (Dowhower, 1987; Samuels, 1979). It depends upon a reader's basic decoding skills, including phonological awareness, and knowledge of syntax (Cooper & Stewart, 1987). More fluent readers were found to read with greater comprehension (White, 1995). Excessively slow, halting reading limits comprehension and the amount of print that can be read, creating a burden that can extinguish the desire to read (LaBerge & Samuels, 1974; Nathan & Stanovich, 1991; Samuels, 1994). The use of context to help identify specific words does not sufficiently compensate for laborious basic decoding skill (Shaywitz, 1996). Lack of fluency affects many struggling secondary readers (Mathes, Simmons, & Davis, 1992). They read less text in the same amount of time as do more fluent readers and have less text to remember, comprehend, and appreciate.

Building Decoding Skill

Two factors, explicit instruction and teacher responsiveness, seem to characterize most successful instructional programs for building decoding skill. McCormick and Becker (1996) found that students with learning disabilities also benefited from indirect word study. Decoding skill also has implications for second language learners.

Explicit instruction for word recognition. This approach has been effective with struggling secondary readers (Gaskins, Cuncelli, & Satlow, 1992; Lenz, & Hughes, 1990; Lewkowicz, 1985; Meyer; 1982). Henry (1993) argued that these readers need extended decoding and spelling instruction to help them decode multisyllabic words. Successful programs, such as one developed by McNinch (1981) emphasize explicit instruction by a responsive teacher and include an explanation of *what* skill is being taught, regular modeling of *how* to perform the skill, constant discussion of *why* the skill is important, and demonstrations of *when* it is best to apply the skill. Struggling readers benefit from expert modeling of fluent reading and repeated readings (Chall, 1996), reading practice with different kinds of texts (Snow et al., 1998), authentic reading tasks and a rich literacy environment (Apel & Swank, 1999; Gaskins, 1997; Taylor, Harris, Pearson, & Garcia, 1995).

Implications for second language learners. Decoding skill or word recognition presumes oral proficiency in English, which has implications for second language learners. In recommending practice for younger readers Snow and colleagues (1998) advised that students reading in their native language be taught to extend their skills to reading in English as they acquired proficiency in spoken English. For younger students who did not read in L1, the recommendation was to first develop basic proficiency in spoken English. Teachers of second language learners struggling with decoding should identify and take advantage of L1 decoding skills that may transfer across languages, such as phoneme segmentation and word identification strategies (National Research Council, 1997). A rich environment of literacy resources is especially important for these readers.

Language Comprehension

The comprehension of language includes linguistic knowledge, background knowledge, making inferences, and the self-regulation of comprehension (or metacognition).

Linguistic Knowledge

Comprehension builds on linguistic knowledge, or knowledge of the language system: its phonology, semantics (including morphology and word meaning), and syntax, or grammatical structure.

Phonology refers to knowledge of how the sounds of language are used to convey differences in meaning. Despite dialect differences, most secondary students have a common knowledge of the phonology and syntax of their native language. The importance of semantic knowledge shows up in the strong correlations between comprehension and the size and degree of both general and passage-specific word knowledge, or vocabulary (Beck & McKeown, 1991). Proficient readers acquire new words by wide reading and repeated exposures to words in varying contexts (Blachowicz & Fisher, 2000). A striking gap in word knowledge differentiates proficient from struggling readers (Baker, Simmons, & Kameenui, 1995) who have read less.

Building linguistic knowledge. To build linguistic knowledge, struggling readers need more than opportunities for incidental learning. A meta-analysis by Stahl and Fairbanks

(1986) shows traditional instruction in word definitions has little effect. Word study and explicit instruction that includes orthography, morphology, and spelling can strengthen the effects of vocabulary learning (Templeton & Morris, 2000). Students should have opportunities for active learning of words, for making personal connections, and for exposure to words in multiple sources (Blachowicz & Fisher, 2000). All students benefit from learning about how language works: the cultural connotations of words, changes in spelling over time, and dialect rules and consistencies.

Implications for second language learners. Opportunities for social interaction can help struggling second language learners acquire linguistic knowledge of English. Additionally, a sight word vocabulary of high-frequency words (estimates range from 2,000 to 10,000 words) prepares them to learn English from context (Grabe, 1991). Syntactic knowledge also bears on the teaching of second language learners. For example, Nagy, McLure, and Montserrat (1997) found that bilingual middle school students made transfer errors of applying Spanish syntax not found in English, impairing their comprehension. Finally, struggling second language learners likely will need instructional assistance in applying their knowledge of cognates to English vocabulary (Garcia & Nagy, 1993).

Background Knowledge

The background knowledge of how environments operate (as explained by schema theory) makes a contribution to comprehension that can be separated from word-level knowledge, though both affect how well and how much is comprehended (Stahl, Hare, Sinatra, & Gregory, 1991). Background knowledge can be categorized as world knowledge and domain-specific knowledge that is both declarative and procedural.

By the secondary grades, students have amassed background knowledge of the world and its social and cultural contexts, much of which is external to the reading tasks of school. These tasks are likely to be more familiar to those students who have acquired knowledge from thousands of hours of being read to. Studies of background knowledge have been primarily of the strong effects of declarative and procedural domain knowledge (as of baseball, or of school subjects such as math or history) on comprehension (Gaultney, 1995; Gough, Hoover, & Peterson, 1996). The domain of schooling includes knowledge of social and cultural expectations and discourse, the ignorance of which may differentially affect the language comprehension of struggling CLD readers.

Contexts for building background knowledge. Wide reading, typically avoided by the struggling secondary reader, builds background knowledge and can be encouraged by allowing self-selection of personally interesting and relevant texts. The building of background knowledge should not be limited to print, but expanded to include other contexts. Struggling readers also benefit from explicit instruction in strategies for activating and connecting what they know in the context of reading. Fragmented knowledge can be connected and shallow understanding deepened by readers reflecting upon and communicating their learning to others in a social setting.

Before concluding a student lacks background knowledge, teachers should look for what may already have been learned in a first language that is inert, unconnected knowledge, and for culturally-related knowledge ("funds of knowledge") that can be activated and connected to a reading task.

Making Inferences

Comprehension beyond the word level requires the comprehender not only to activate background knowledge but also to use it in integrating meaning across sentences. As the message becomes less familiar, inferencing demands increase. Many poor comprehenders have difficulty making inferences, even when they decode fluently. The language comprehension ability to draw inferences develops as children move beyond the primary grades (Beal, 1990; Chikalanga, 1993) and is aided by long-term memory for sentences as well as background knowledge (Wilson & Hammill, 1982). In order to read to learn from text (and thus acquire new background knowledge) readers need to actively construct a mental model of the text that draws upon the text and their own background knowledge (Graesser, Millis, & Zwan, 1997). This active construction of meaning from text is consistent with popular constructivist views of learning. Secondary students for whom reading comprehension has been a "search and find" response to literal level questions may not believe they are permitted to construct meaning from text.

Building inferencing skill. Struggling secondary readers are often remediated with well-structured or "considerate" text that reduces the requirement for making inferences. Although this practice can build fluency, it does not help struggling readers move beyond literal levels of understanding. Readers with sufficient prior knowledge, who are forced to infer unstated relationships, engage in deeper processing and comprehension (McNamara, Kintsch, Songer, & Kintsch, 1996; McNamara & Kintsch, 1996). In addition to opportunities to read more complex text, struggling secondary readers need support in how to use background knowledge and text structure to determine relationships among ideas and to draw conclusions. Instructional support can come from teacher modeling, such as "think alouds" (Davey, 1983), and mapping.

Implications for second language learners. Struggling second language learners may fail to apply strategies for making inferences in their first language to reading in English (National Research Council, 1997). Teachers should look for opportunities to demonstrate how inferences based on cultural differences in background knowledge can lead to differences in comprehension.

Self-Regulated Comprehension

Proficient reading requires the metacognitive processes of evaluating comprehension and regulating difficulties (Snow et al., 1998). This self-regulated comprehending (Hacker, 1998), often called executive control or metacognition, involves activating knowledge, making predictions about meaning, reflecting on what has been comprehended, and revising understanding. In maturing readers, self-regulated comprehending emerges with reading practice and the acquisition of knowledge about reading (Cooper, 1998), a development that further widens the gap between proficient readers and those who are struggling. Proficient readers expect to comprehend. They have strategies for decoding and comprehending. A weak knowledge base can limit the use of effective comprehension strategies, as Carr and Thompson (1996) found with struggling middle school readers. Readers need sufficient background knowledge to be able to monitor whether meaning is a guess or a certainty (Oakhill & Yuill, 1996; Ruffman, 1996).

Building self-regulated comprehension. Teachers can help students develop these skills by explicitly modeling expert reading through think-alouds (Davey, 1983; Wade, 1990), by guiding strategy practice, and by ensuring that students independently apply strategies to authentic reading tasks. When taught such strategies as self-questioning, secondary students improved in comprehension (Gaultney, 1995; Haller, Child, & Walberg, 1988). Strategy instruction was more effective for students in higher grades and also when done in small groups (Chiu, 1998).

Implications for second language learners. Successful bilingual readers have been found to view reading as unitary across languages. They transfer to L2 the metacognitive strategies of questioning, rereading, and evaluating as well as use such bilingual-specific strategies as code mixing, searching for cognates, and translating. Metacognitive benefits seem to accrue for second language learners when the second language is additive (the first language remains strong) rather than when it is subtractive (at the expense of the first language) (Garcia, Jimenez, & Pearson, 1998; National Research Council, 1997). The implications of this work are potentially powerful for struggling bilingual readers, who can be led to use these strategies for constructing meaning and to view their bilingualism as an asset.

Transaction with Text

Proficient readers engage in dialog with text (Alexander, 1997; Henk, Stahl, & Melnick, 1993; Molinelli, 1995). In Rosenblatt's (1978) theory of reader response, the interchange of ideas between the reader and the text, or the speaker and the listener, is called transaction. The transaction occurs from two stances, which Rosenblatt describes as the reader's focus of attention during reading. In classrooms beyond the elementary grades, students typically assume the information-gathering "efferent" stance. This stance characterizes reading strategies that utilize background knowledge in neutral and objective ways. In contrast, the "aesthetic" stance allows for a personal response, in which emotions, experiences, and appreciations (such as an appreciation of beauty) are called to mind as the reader engages in transaction. Although usually associated with and modeled instructionally through the reading of narrative text, the aesthetic stance can also be taken with informational text. For example, while reading factual information about Paris, the reader might imagine a personal visit (Alexander, 1997). Transaction enables readers to negotiate the meanings of the texts they read, toward the acquisition of "critical literacy" (Shannon, 1995). Moreover, when students are aware of the social processes of production and interpretation of text, they can gain in comprehension (Hinchman & Moje, 1998).

Contexts for Building Transaction with Text

Transaction with text supports engaged and motivated reading. Through modeling by a teacher or peer, as with the think-aloud strategy, struggling secondary readers can see how they might contribute their own response to reading. Related work by O'Brien (1998) describes a transactive approach in which teachers help adolescent readers connect their language environments outside of school to reading. The practice of developing literacy histories can also help students connect the personal and the academic.

Struggling secondary readers can become engaged and proficient readers when motivation, decoding, language comprehension, and transaction with text build in ways that are appropriate for the reading context and are responsive to their cultural and linguistic diversity. One example of how the factors are interrelated is when transaction with text motivates reading practice, which further develops comprehension and decoding, which enables deeper transaction.

The next two sections summarize research on (a) reading instruction for the secondary classroom and (b) the professional development of teachers.

PRINCIPLES OF EFFECTIVE READING INSTRUCTION

The principles described here represent a synthesis of recent research and can serve to guide educators in selecting and implementing resources for struggling secondary readers.

Recognition and Honor of Cultural and Linguistic Diversity

Culture, dialect, and language contribute "funds of knowledge" (Moll et al., 1992) that are assets in the building of reading proficiency for all readers and particularly those who are CLD. Through assignments, activities, classroom discussion, and reading materials, teachers can provide ways for students to connect what they know with the academic literacy of school (Williams & Snipper, 1990). Teachers can help students make these connections by modeling emotional response to a reading (e.g., the aesthetic stance articulated by Rosenblatt, 1978) as well as the analytical or efferent stance. Acknowledging literacy histories in the classroom helps to create a climate of respect, which invites the participation of all students.

Assessment During Teaching

Following the diagnostic instruction principle (Gillet & Temple, 1990), the effective teacher begins instruction by assessing the reader to determine strengths and weaknesses, without the labels of disability deficits. To provide appropriate support, teachers should know the history of a student's reading difficulties, the interventions made, and the instruction missed. For example, the teacher can look for evidence of the development of reading proficiency such as phonemic knowledge at the primary grades, background knowledge at grades three and four, and strategy knowledge at the upper grades (Wilson & Rupley, 1997). The teacher uses the reader's strengths to approach and build the areas of difficulty. Assessment follows the instruction and is both summative (Did the instruction work?) and formative (Where do we go from here?), beginning the instructional cycle anew. Teachers assess and scaffold students at three junctures: before, during, and after reading.

Scaffolds Before, During, and After Reading

Since the 1970s, a number of specific teacher strategies for building reader comprehension were identified and validated. These strategies center on the notion of providing struggling readers with support as they learn how to read. Strategies such as questioning, discussion, and writing serve as supports or scaffolds for struggling readers. Teachers should model and students should practice: relating prior knowledge to the text and making predictions about the content before reading, interpreting the meaning by constructing mental images and summaries during reading, and asking questions and seeking clarification after reading (Pressley, 1999).

The term scaffold is a Vygotskian metaphor for teacher support of a learner through dialog, questioning, conversation, and nonverbal modeling, in which the learner attempts literacy tasks that could not be done without that assistance. Roehler and Cantlon (1997) identified five types of scaffolding: (a) offering explanations, (b) inviting student participation, (c) verifying and clarifying student understandings, (d) modeling of desired behaviors, and (e) inviting students to contribute clues for reasoning through an issue or problem. Additional effective scaffolds, especially for struggling secondary readers, are to address the emotional aspects of learning and make learning benefits explicit (Brophy, 1999; Sanacore, 1997).

Repertoires of Strategies

Reading strategies are effective tools for comprehending (Pressley, 1999); they represent procedural rather than declarative knowledge, stressing "how" as much or more than "what." Strategies help readers to engage with the text, to monitor their comprehension, and to fix it when it has failed. Rather than a single strategy applied in a reading class, secondary students need to have a repertoire of strategies that they learn and apply in many reading contexts and not just in a reading class. As Pressley and Wharton-McDonald (1997) note, more social constructivist and transactional approaches have led to strategies that are less formulaic and more successfully internalized by students. Many studies have demonstrated the success of these approaches for struggling secondary readers (see Carr & Thompson, 1996).

Explicit Instruction of Strategies

To learn a strategic approach to reading, struggling readers typically must be taught how, why, and when to use it. An effective way to teach a reading strategy is to follow the Pearson and Gallagher "Gradual Release of Responsibility" model (1983). Teachers model through a think-aloud (Davey, 1983; Wade, 1990), sharing their self-talk about how they strategically approach reading, making their expert thinking visible to struggling readers. Guided practice in the strategy follows the modeling as students attempt the reading strategy within a context of support from peers with the teacher evaluating its effectiveness, adapting it as needed, and generating a consensus as to its effectiveness. Most important is sufficient independent practice of the strategy in different texts and contexts as students take ownership of these strategies, adapting them to these different reading situations. The shifting of responsibility for learning from the teacher to the learner allows the struggling reader to adapt and internalize strategic reading.

Reading Practice

As struggling readers are learning strategic reading, they need frequent, sustained periods of reading connected prose (Hansen, 1987), such as opportunities to read uninterruptedly from a book, newspaper, magazine, or other whole piece of text for at least 15 to 20 minutes. But independent silent reading, conducted without guidance or feedback, is not sufficient to build reading improvement (National Reading Panel, 2000). This suggests that students also need the opportunity to talk about ideas in texts, in order to move comprehension beyond the word level (Pressley & Wharton-McDonald, 1997), that is, guided practice in building consensus.

To build fluency, reading practice with active support and feedback, such as guided oral reading and repeated reading, was found to be effective across multiple grade levels (National Reading Panel, 2000). Not recommended for reading practice is the popular "round robin" reading, in which students read aloud in turn to the whole class from a common textbook. Not only do students find its purpose unclear, it can be an embarrassing experience for adolescent readers who lack fluency. It promotes a perception that reading is word pronunciation more than comprehension (Wood & Nichols, 2000).

Student Choice and Authentic Tasks

Students who choose reading for a personally relevant purpose likely will be more motivated to accomplish that task. For adolescents, that purpose likely addresses their fundamental questions, "Who am I?" "Where and how do I fit?" and "What can or should I do with my life?" Practically, students should be helped to articulate their personal learning and reading goals at the outset of any instructional session (Block, 1999). This goal-directed reading provides purpose and direction, which is inherently motivational and engaging.

Reading success may not be enough to build self-efficacy, but it can be helped by these approaches: (a) allowing a choice of tasks and materials that are personally meaningful (Alexander, 1997; Cope, 1993; Taylor, 1999; Worthy, 1996) and (b) changing student expectations or schema about what it means to engage in academic activities and use strategies to accomplish goals (Brophy, 1999).

Scaffolding Across the Classroom Curriculum

Reading strategies that are not supported beyond the reading classroom by content-area teachers have little chance of being transferred by struggling secondary readers. For struggling secondary readers to improve, their reading must be scaffolded and strategies must be reinforced across the curriculum, over a period of years (Gaskins, 1998). They need explicit instruction for the transfer of strategic reading to a variety of contexts and texts.

PRINCIPLES OF EFFECTIVE PROFESSIONAL DEVELOPMENT

To determine how teachers of literacy, both in general education as well as reading classrooms, might best develop their ability to implement sound practices, we looked to the research on effective professional development. We summarized what we found into four tenets.

Continuous and Sustained Learning

Practitioners and staff developers alike have recognized the limitations of one-time workshops for learning. The National Staff Development Council (2000) has issued standards that advocate more comprehensive models, such as peer mentoring and coaching, which are a commitment to learning over an extended period of time.

Locally Based Initiatives

Faculty study teams can investigate relevant topics and implement programs that meet the needs of their students. Through the World Wide Web, educators have ready access to research and educational resources. The International Reading Association has begun a professional development project called Schools as Learning Communities. Professional development activities should be directed toward the development of such locally based learning communities.

Adaptation Rather Than Adoption of Programs

Giroux (1990) proposed the work of the teacher as "intellectual," rather than one of implementing the prescriptions of instructional programs. Experienced teachers object to instructional initiatives that script their actions, denying them the opportunity to be an instructional decision maker. Professional development activities should lead teachers to adapt sound instruction to their unique contexts.

Teacher as Researcher

The National Reading Research Center articulated a model of professional development in which teachers conduct classroom research and examine their own literacy practices (Allen, Shockley, & Baumann, 1995). In the work of Moll and colleagues (1992), teachers became ethnographers, visiting homes and communities to design more meaningful reading instruction. Effective professional development can also provide teachers with opportunities to select reading strategies appropriate for their struggling secondary readers, a sustained period of time to apply this instruction, and a planned effort at evaluating its effectiveness. The notion of teacher as researcher allows the teacher to formatively evaluate struggling readers' progress and their instruction at improving it.

KEY POINTS ABOUT STRUGGLING SECONDARY READERS

These students . . .

- comprise about one fourth of all secondary students
- struggle with the reading required for academic survival at their grade level
- come from varied populations, including
  - some second language learners who
    may read in their native language
    may need social interaction to develop oral proficiency in English
  - students with learning disabilities
  - students marginalized from the culture of school
  - students who have received inappropriate reading instruction
- likely suffer psychological, emotional, and cognitive consequences of years of lack of reading success
- need support in orchestrating strategies and in transferring reading skills beyond the remedial reading context, such as into content classrooms and nonschool settings
- may lack motivation
  - need meaningful materials and tasks
- may struggle with decoding
  - challenged by multisyllabic words
  - need to acquire and apply morphological knowledge
  - need reading practice to develop fluency
- may have limited language comprehension
  - limited linguistic knowledge
  - need for language differences to be recognized and honored in the classroom
  - need multiple opportunities and sources for active learning of words
  - limited background knowledge
  - need to connect experiences beyond the classroom with school reading
  - difficulty making inferences
  - need scaffolded reading of complex texts
  - difficulty in self-regulated comprehending
  - need explicit strategy instruction
  - need to use metacognitive assets from second language learning
- may not transact with text
  - need models for making personal responses to text
- need support following principles of effectiveness that have emerged from years of research in
  - reading instruction and
  - teacher professional development

PART II: RESOURCES

FIVE QUESTIONS ORGANIZE THE PROGRAMS AND STRATEGIES

The resources are listed in alphabetical order by title within the categories of programs and strategies. The descriptions are organized around five questions.

1. *What is it? How does it work?*

This section begins with an overview and brief history of the resource. For programs, it describes major components and materials and lists developer or publisher contact information. For strategies, detailed instructional procedures may be sufficient for teachers to implement them in the classroom. Teachers can also refer to specific readings provided in the resource description. Additional readings that may be helpful to teachers are indicated by an asterisk in the bibliography section, beginning on page 136.

2. *What professional development is required? What is provided?*

For programs, this section includes information about the model of professional development, the level of prerequisite teacher preparation, materials, training, and costs. For strategies, this section includes the level of prerequisite teacher expertise and the amount of time necessary to learn the strategy. In reading this section, keep in mind the principles of effective professional development for teachers explained on pages 19–20 (continuous and sustained, locally based initiatives, adaptation rather than adoption, teacher as researcher).

3. *How does it develop reading proficiency?*

This section describes how the program or strategy builds reading proficiency along each of four major factors explained on pages 9–17 [motivation, decoding skill (including fluency), language comprehension (including linguistic knowledge, background knowledge, making inferences, and self-regulated comprehending), and transaction with text].

- Primary Outcome: A factor of reading proficiency for which a program or strategy, as designed, is likely to help build.
- Secondary Outcome: A factor of reading proficiency for which a program or strategy, as designed, is likely to help build, but it is not the most important reason to select it.
- Possible Outcome: A factor of reading proficiency for which a program or strategy, as designed, may help build, depending upon additional support from the teacher or the instructional context.

How does it support effective reading instruction?

For programs and strategies, the principles of effective reading instruction are presented as materials, reading task, instructional approach, and student scaffolds, as well as the congruence of the intervention with the regular (nonremedial) classroom curriculum. In reading this section, keep in mind the principles of effective reading instruction explained on pages 17–19 (eight principles of effective reading instruction: recognition and honor of cultural and linguistic diversity; assessment during teaching; scaffolds before, during, and after reading; repertoires of strategies; explicit instruction of strategies; reading practice; student choice and authentic tasks; scaffolding across the classroom curriculum).

How effective is it?

A rubric was used to rate a resource overall as well established, established, or promising. The resource was assigned the overall rating for which it met at least two of the corresponding component ratings within the four criteria (documentation, recency, effectiveness, and extent of implementation). Resources for which there was insufficient evidence in more than one category of the rubric were not included in the *Guide*. See the rubric "Rating of Resources for Building Secondary Reading Profiency Based on Level of Support and Implementation" on page 5.

Terminology

To determine how terms are used, refer to the definitions beginning on page 129.

PROGRAMS

Eleven programs for supporting the instruction of struggling secondary readers are described in this section:

- Accelerated Reader (AR)/Reading Renaissance
- Benchmark Word Detectives Program for Fifth Grade and Above
- First Steps®
- Multicultural Reading and Thinking (McRAT)
- Project CRISS (Creating Independence Through Student-Owned Strategies)
- READ 180® Program
- Read RIGHT
- Reading Power in the Content Areas (RP)
- Strategic Instruction Model (SIM)
- Student Team Literature (STL)
- Wilson Reading System (WRS)

Accelerated Reader (AR)/Reading Renaissance Program

Publishers	Advantage Learning Systems, Inc. P.O. Box 8036 Wisconsin Rapids, WI 54495-8036
Web site	http://www.advlearn.com
Email	answers@advlearn.com
Background	AR is a computer software program that tracks student reading of leveled trade books. Developers Terrence D. and Judith Paul made it available in the early 1990s and formed the Institute for Academic Excellence for continuing program development. A new companion program, Renaissance Learning, supports teacher professional development.
Primary Outcomes	Fluency
Students	All readers, grades K–12
Setting	Campus program Reading and Language Arts classes
Support for Culturally and Linguistically Diverse Readers	Culturally relevant texts may be selected for reading. Some books tested by AR software are available in Spanish and in audio book formats.
Instructional Approach	Computer-managed reading practice system
Materials	Diagnostic and management computer software and electronic quizzes for some 25,000 trade book for children and young adults
Cost	\$400–\$3,000 for 1,000 quizzes
Effectiveness	Promising

What is it? How does it work?

Accelerated Reader (AR) is a computer-based assessment system of student comprehension of some 25,000 books ranging in reading levels from grades one to twelve. Developers Terrence D. and Judith Paul made the program available through Advantage Learning Systems, Inc., in the early 1990s. They formed the Institute for Academic Excellence for continuing program development. Recently a supporting professional development program called Reading Renaissance has been made available. AR has been implemented widely in the United States, Canada, and the United Kingdom.

First, the AR computer assessment system (called STAR Reading) determines a student's level of reading comprehension, yielding a norm-referenced score. Based on this score, a student is assigned to a level for independent reading. The developers have borrowed a term from constructivist learning, the "zone of proximal development" (ZPD), to refer to this reading level.

Students self-select from books that have been coded by reading level. Readability is calculated through traditional formulas that count words and syllables. Once students have completed reading a book they take a short (10–20 items) literal-level comprehension test. The management system provides the percentage scores to students, as well as to teachers and librarians, who may then advise students on further choices for reading.

Students are rewarded for reading and performing well on tests by gaining points (determined by the readability level and length of a book). Students gaining many points may be rewarded with prizes.

Studies done by the developers have shown growth in mean scores on standardized reading tests for AR students, increased library use, and increased time-on-task reading.

What professional development is required? What is provided?

Teachers in all disciplines are trained on the use of the software that administers the tests on AR books and that compiles reports. Additional training is available through Reading Renaissance one- or two-day seminars where teachers are trained to help readers set goals, diagnose and solve reading problems, create minilessons, and use peer tutoring. Each program includes 12 months of toll-free call-up support.

- Starter Program ($399)—Includes software to provide 30 reports, a network license for 200 students, and 200 AR quizzes (for 200 books).
- Economy Program ($1,499)—Includes software to provide 30 reports, a network license for 200 students, and 1,000 AR quizzes (for 1,000 books).
- Super Program ($2,999)—Includes STAR Reading software which provides norm-referenced reading scores, placement at reading levels, and measurement of growth, in addition to 30 reports, a network license for 200 students, and 1,000 AR quizzes (for 1,000 books).

Contact Advantage Learning for prices on Reading Renaissance training.

How does it develop reading proficiency?

Primary Outcomes: Fluency

Motivation

Secondary outcome: Intrinsic motivation is fostered through the self-selection of books, although students are advised not to read books outside their range. The motivation to begin reading and persist is extrinsically reinforced by the points earned for attaining a level of performance on the comprehension posttest. These points may be traded for prizes. Whether and how these rewards are used can greatly affect student motivation for reading.

Decoding

- *Basic Decoding*

  Not addressed.

- *Fluent Decoding*

  Primary outcome: Students read books they are predicted to be able to decode, but for which content or vocabulary may be moderately challenging. Students can build fluency through reading practice.

Language Comprehension

Comprehension processes addressed:

☐ **Making associations**
☐ **Predicting**
☐ **Generating questions**
☐ **Generating mental imagery**
☒ **Clarifying**
☐ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☐ **Evaluating**

Accelerated Reader (AR) does not address comprehension through instruction or instructional materials. It is a management program for determining the range of a student's independent reading level, recommending books within that range, and then testing literal-level comprehension to ensure the book has been read.

- *Linguistic Knowledge*
  Not addressed.

- *Background Knowledge*
  Not addressed.

- *Making Inferences*
  Not addressed.

- *Self-Regulated Comprehending*
  Secondary outcomes: Through the process of selecting books coded to their level of independent reading, students can develop a sense of their own reading ability as measured by comprehension tests. The point system rewards them for selecting more challenging books. In checking the computer feedback on their test performance, students can build metacognitive awareness of their comprehension. The program develops skill in taking multiple choice tests.

Transaction with Text

Not addressed. The comprehension posttests require literal-level student response from an efferent stance. The program does not provide for developing aesthetic stance beyond the self-selection of reading materials based upon interest.

How does it support effective reading instruction?

Materials

Students self-select from a list of AR-provided trade books coded to be in their range of independent level reading level. The readability is determined by quantitative readability formulae. Titles include both narrative and expository texts.

Reading Task

Students read and take multiple-choice tests in order to earn points. Educators implementing AR determine the rewards for those points.

Instructional Approach

AR is a computer-managed reading practice system.

Student Scaffolds

Before reading, students are provided with books that are coded to their reading level. The postreading scaffold is a test of comprehension and feedback on performance, which guides students to a level of challenge in selecting a new book.

Adaptability/Congruence with the Classroom Curriculum

Although Advantage Learning does not encourage substantive program adaptation, some adaptation is possible. Specifically, teachers can adapt the time dedicated to reading, integrate comprehension strategies, and add new titles to the AR list. Accelerated Reader may fit well within Language Arts, English, and Reading classrooms where time is allocated for sustained silent reading.

How effective is it?

Studies done by the developer and publisher have shown growth in mean scores on standardized tests for AR students (including secondary readers), increased library use, and increased time-on-task reading.

Rating: Promising

Studies of AR report mixed but generally positive effects. Studies by the developer from the Institute for Academic Excellence report growth in mean scores on standardized tests for AR students, increased library use, and increased time-on-task reading. However, for these studies the schools were invited to submit their data for analysis. Improvements appeared to be greater for readers who were younger and struggling than for those who were older and more proficient.

Available studies concerning AR include these:

Labbo, L. (1999). Critical issues: Questions worth asking about AR. *Reading Online.*

Peak, J., & Dewalt, M. (1994). Reading achievement: Effects of computerized reading management and enrichment. *ERS Spectrum, 12,(1)* 31–34.

After using AR over a 5 year period, college-bound ninth graders from two junior high schools scored higher than a control group on the district standardized reading test.

Poock, M. (1998). The Accelerated Reader: An analysis of the software's strengths and weaknesses and how it can be used to its best potential. *School Library Media Activities Monthly, 14*(9), 32–35.

This discussion of AR is from the perspective of two elementary schools.

Topping, K. J., & Paul, T. D. (1999). Computer-assisted assessment of practice at reading: A large-scale survey using Accelerated Reader data. *Reading and Writing Quarterly, 15*(3), 213–231.

Reading practice was operationally defined as AR points reported by schools using AR in a mail survey from 1992 and 1993 (response rate: 17%) conducted by the developer. Average AR points per student were found to be higher in states with higher NAEP reading scores and lower in states where the scores were lowest. Also, 64% more time was devoted to AR in schools that had implemented AR for four years compared with schools that had implemented it for one year. Finally, private school students logged more AR points than did public school students.

Vollands, S. R., Topping, K. J., & Evans, H. M. (1999). Computerized self-assessments of reading comprehension with the Accelerated Reader: Impact on reading achievement and attitude. *Reading and Writing Quarterly, 15*(3), 197–211.

Two action research studies of AR were conducted with mixed ability, low-income, and ESL fifth and sixth grade children in Scotland. In both studies, AR students showed significantly higher gains on a norm-referenced test of reading comprehension than a comparison group given time for reading practice from limited selections. Improvement in reading attitude was significant for girls but not boys. When a cross-age, assisted reading strategy was implemented with AR, students also gained in reading accuracy over the comparison group. These students were not interested in the AR rewards, suggesting that the reward system may not be important to the use of the program.

Where has it been implemented successfully?

Advantage Learning, Inc. lists the following sites:

- Bryan Independent School District, Bryan TX: Implemented AR in three middle schools since 1996.
- Pittsburg Middle School, Pittsburg, TX: Implemented AR since 1992.
- Craven County School District, New Bern, NC: Districtwide implementation of AR since 1993.
- Monroe County School District, Key West, FL: Implemented AR (plus other programs) in 1998.

Benchmark Word Detectives Program for Fifth Grade and Above

Developers	Irene Gaskins, in collaboration with Colleen O'Hara, with input on lessons from Susie Delemitas and Susan North. Consultant for the Program: Linnea C. Ehri.
Publishers	Benchmark Press 2107 North Providence Road Upper Providence Township Media, PA 19063
Web site	http://www.benchmarkschool.org
Telephone	610.565.3854 Fax: 610.565.3872
Background	Benchmark School enrolls struggling readers grades 1–8 who have decoding problems. It is known for teaching "decoding by analogy" strategies in the context of a full literacy program. A vocabulary component was added in the 1990s. The new Word Detectives program for older readers was been piloted and published in 1999.
Primary Outcomes	Basic Decoding, Fluency, Linguistic Knowledge, Self-Regulated Comprehending
Students	Struggling secondary readers with decoding problems who are reading at second grade level and above
Setting	Classroom program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Teachers should use Benchmark in the context of a full literacy program that addresses the needs of CLD readers. Culturally relevant texts may be selected for reading.
Approach	Modeling, guided practice, independent practice; assessment during teaching; inductive learning; cooperative learning
Materials	Some teacher and student materials provided
Cost	$200–$400 per classroom
Effectiveness	Promising

What is it? How does it work?

The Benchmark program originates at the Benchmark School in Media, Pennsylvania. The school enrolls struggling readers grades 1ñ8 whose reading difficulties are due to decoding problems. Since the 1980s, teachers and researchers at Benchmark have shared their programs and strategies for these students. The Benchmark Word Identification program implements a successful approach to teaching students to decode called "decoding by analogy." Students use known words to decode unknown words, use context as a check for making sense, chunk words into meaningful units, and learn to be flexible in applying known word parts. A vocabulary component was added to the program in the 1990s.

Longitudinal data following Benchmark students through middle school showed that some still lacked fluency and had spelling difficulties. The Word Detectives series adds a segmenting and sound-letter matching component, which has increased the rate of success of these students at Benchmark. Struggling secondary readers are presumed to have acquired phonemic awareness and concepts about print and to be reading at second grade level and above. The program teaches students to

1. learn "key words" and "special feature words" with the most common English patterns and discover their consistencies,
2. use those words and discoveries about language to decode and spell high frequency words, and
3. develop an awareness of spelling and a control of spelling strategies for high frequency words.

The first phase of the program introduces students to the concepts of decoding and spelling by analogy. A second phase consists of 10-day lesson cycles that support students in applying the concepts to decoding and spelling multisyllable words. Students derive spelling generalizations inductively rather than through direct instruction of rules. The developers say the program should be taught a minimum of 30 minutes a day, five days a week to be successful.

The Benchmark approach is intended to be one part of a full literacy program in which students read widely, write, and talk about what is read. The success of Benchmark students has come about with constant application and a large amount of practice.

What professional development is required? What is provided?

Experienced teachers with some background in reading should be able to implement the program. Although no formal training time is required or provided, teachers will need three to six days of independent preparation time to study the materials provided and make adaptations for their own students' needs. Teachers may attend workshops and conferences offered at the Benchmark School in Upper Providence Township, Media, Pennsylvania.

The program materials include a teacher's guide, worksheets, 30 nonfiction story sheets and 150 daily lessons that each takes approximately 30 minutes of class time. The cost per classroom is $300 plus $15 shipping and handling. Supplemental materials include the book, *Improving Cognitive Strategy Training Across the School: The Benchmark Manual for Teachers*, by Irene Gaskins and Thorne Elliot (1991) at a cost of $24.95.

How does it develop reading proficiency?

Primary Outcomes: Basic Decoding, Fluency, Linguistic Knowledge, Self-Regulated Comprehending

Motivation

Secondary outcome: Students graph their own progress without comparing their progress to peers' progress. Students are motivated by their own success.

Decoding

- *Basic Decoding*

Primary outcome: Students (who are presumed to have acquired phonemic awareness and concepts about print) build proficiency in decoding and spelling "multichunk" words. Rather than learning rules of syllabication, students apply a "chunk" strategy that offers many possible ways to divide a word for pronunciation. Students also apply the "decoding by analogy," or "compare/contrast" approach successful with elementary readers. Students use common words with high-frequency spelling patterns to decode unknown words.

- *Fluent Decoding*

Primary outcome: The "whole-part-whole" decoding strategy asks students to immediately practice a new word in the context of connected text, thus developing fluent decoding skills. Through partner reading, students further develop fluency.

Language Comprehension

Although differentiated by its focus on word recognition and spelling, Benchmark recommends the implementation of a full literacy program toward the ultimate goal of building comprehension.

Comprehension processes addressed:
☒ Making associations
☒ Predicting
☒ Generating questions
☒ Generating mental imagery
☒ Clarifying
☒ Elaborating
☒ Summarizing
☒ Rehearsing
☒ Evaluating

- *Linguistic Knowledge*

Primary outcome: In the Word Detectives program, students learn the structure of language, such as word parts and partial meanings. They form and test hypotheses about language, in which they make inferences and develop metacognitive awareness of their understandings of language.

- *Background Knowledge*

Secondary outcome: The reading of informational texts supports the acquisition of background knowledge.

- *Making Inferences*

Secondary outcome: Students develop inferencing skills through hypothesis testing, and by reflecting upon and discussing what they have read.

- *Self-Regulated Comprehending*

Primary outcome: In applying decoding strategies independently and returning decoded words to the whole text, students check to see if the text makes sense. They develop metacognitive awareness of their understanding of language.

Transaction with Text

Secondary outcome: As readers discuss their understandings of texts with their peers, students come to understand that different readers bring different perspectives to the text.

How does it support effective reading instruction?

Materials

Students read primarily self-selected informational texts.

Reading Task

With repeated application of strategies to new texts, and the support of a full literacy program, word identification strategies can transfer to new contexts.

Instructional Approach

The instructional approach is varied. Students are taught strategies through explicit teaching. Teacher strategies such as EPR (Every Pupil Response) are designed for diagnostic instruction. The program requires students to form and test hypotheses about language. Students derive spelling generalizations inductively.

Student Scaffolds

Before reading, students engage in prediction strategies. During reading, they apply decoding by analogy strategies to unknown words. After reading, the decoding strategies are discussed and followed by application in a reading or writing activity.

Adaptability/Congruence with the Classroom Curriculum

Although Benchmark lessons are structured, they contribute to a full literacy program that teachers determine and that is supported across the curriculum. General education teachers can support struggling readers by integrating Benchmark strategies.

How effective is it?

The Benchmark Program, grades 1–8, has been extensively researched and evaluated over the 30 years at the Benchmark School. While the new program described here for adolescent struggling readers has not been formally evaluated with students beyond the middle grades, it builds on the body of work that has been established at Benchmark.

Rating: Promising

The following two publications set out the program's theoretical underpinnings and approach to instruction. A strength of these works is the discussion of professional development for teachers in the integration reading strategies across the curriculum.

Gaskins, I., Cuncelli, E., & Satlow, E. (1992). Implementing an across-the-curriculum strategies program: Reaction to change. In M. Pressley, K. Harris, & J. Guthrie (Eds.) *Promoting academic competence and literacy in school* (pp. 411–426). Boston: Academic Press.

Gaskins, I. W., & Elliot, T. T. (1991). *Implementing cognitive strategy instruction across the school: The Benchmark Manual for teachers.* Cambridge, MA: Brookline Books.

Since the 1980s, program developers consistently have submitted their work at Benchmark to scholarly peer review. The following publications are examples of such review:

Gaskins, I. W. (1988-89). Teachers as thinking coaches: Creating strategic learners and problem solvers. *Journal of Reading, Writing, and Learning Disabilities International, 4*(1), 35–48

Gaskins, I. W. (1994). Classroom applications of cognitive science: Teaching poor readers how to learn, think, and problem solve. In K. McGilly (Ed.), *Classrooms lessons* (pp. 129–154). Cambridge, MA: MIT Press.

Gaskins, I. W. (1998). There's more to teaching at-risk and delayed readers than good reading instruction (Distinguished Educator Series). *Reading Teacher, 51*(7), 534–547.

Gaskins, I. W., & Baron, J. (1985). Teaching poor readers to cope with maladaptive cognitive styles: A training program. *Journal of Learning Disabilities, 18*(7), 390–394.

Gaskins, I. W., Downer, M. A., Anderson, R. C., Cunningham, P. M., Gaskins, R. W., Schommer, M., & the teachers of Benchmark School. (1988). A metacognitive approach to phonics: Using what you know to decode what you don't know. *Remedial and Special Education, 9*(1), 36–41, 66.

Gaskins, R. W., Gaskins, J. C., Gaskins, I. W. (1991). A decoding program for poor readers—and the rest of the class, too! *Language Arts, 68*(3), 213–225.

Gaskins, R. W., Gaskins, J. C., Gaskins, I. W. (1992). Using what you know to figure out what you don't know: An analogy approach to decoding. *Reading and Writing Quarterly, 8*(2), 197–221.

Gaskins,I. W., Satlow, E., Hyson, D., Ostertag, J., & Six, L. (1994). Classroom talk about text: Learning in science class. *Journal of Reading, 37*(7), 558–565.

Where has it been implemented successfully?

Cypress Fairbanks Independent School District
P.O. Box 692003
Houston, TX 77269-2003
Contact: Dr. Sylvia Rendon
281.897.2878

Grapevine Colleyville Independent School District
3051 Ira E. Woods Drive
Grapevine, TX 76051-3897
Contact: Dr. Anne Simpson
817.488.9588
amsimpso@ednet10.net

First Steps® Program

Publishers	Program Representatives: Patricia Calls (ext. 1118 Kevlynn Annandale (ext. 1135) Heinemann USA Publishers 361 Hanover Street Portsmouth, NH 03801
Web site	http://www.heinemann.com/firststeps/
Telephone	800.541.2086 Fax: 800.354.2004
Background	A diagnostic framework guides teachers in linking reading, writing, spelling, and oral language strategies to instruction across the curriculum. It was developed in the Education Department of Western Australia under the direction of Alison Dewsbury and is made available in the United States through Heinemann Publishers.
Primary Outcomes	Motivation, Basic Decoding, Fluent Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All readers through grade 10
Setting	Campus program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Success was reported with diverse struggling readers, including rural Aboriginal students. The diagnostic framework can help teachers see student capabilities that might not otherwise have been recognized.
Instructional Approach	Modeling, guided practice, independent practice; diagnostic instruction; cooperative learning
Materials	Existing classroom materials
Cost	Contact Heinemann Publishers
Effectiveness	Established

What is it? How does it work?

First Steps® is a schoolwide professional development program in reading, writing, spelling, and oral language for teachers of students grades K through 10. It is not a curriculum but instead provides teachers with the knowledge and support they need to implement effective reading strategies in their classrooms.

First Steps® was developed in the Education Department of Western Australia under the direction of Alison Dewsbury. The development resulted from collaboration between classroom teachers and local universities to translate research in literacy development into practice. First Steps® is now also being implemented in the United Kingdom, Canada, and the United States, where it has been available since 1995 from Heinemann USA Publishers. It is currently in 250 school U.S. districts, about half of which have middle school implementations.

A major emphasis of the program is linking assessment to instruction using a diagnostic framework called the Developmental Continua. This framework maps out the stages of language and literacy development throughout the life span. From the framework teachers select teaching strategies and activities that are developmentally appropriate for their students. Rather than evaluative instruments, the continua are a means of informing and guiding instruction.

"Across the curriculum" literacy strategies drive the instruction. The strategies represent what the program developers have found to be the most effective in developing abilities in reading, writing, spelling, and oral language. Teachers are taught to adapt instruction to students with special needs who are included in regular education classes.

What professional development is required? What is provided?

A Professional Development component provides ongoing support that stresses the link between theory and sound practice. It includes newsletters and videoconferences. The Web site features a discussion group for teachers who have participated in First Steps®. Workshops for principals are offered.

Curriculum materials include the diagnostic assessment (The Developmental Continua) and resource books with supporting classroom activities. No student materials are provided.

The required School Development component consists of training all teachers in the school or district. Two days of training are required for each reading, writing, spelling, and oral language component.

Selected teachers are trained as tutors (in a 5-day initial session and 3 1/2 day follow-up session). They coach teachers as they are implementing the program.

Costs for School Development range from $200 to $260 per person. The Tutor Training Course fee is $3,000 per participant.

How does it develop reading proficiency?

Primary Outcomes: Basic Decoding, Fluent Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Possible outcome: Shared reading activities and successful comprehension can result in students developing intrinsic motivation for reading.

Decoding

- *Basic Decoding*

Primary outcome: In the Reading Component, teachers are taught strategies for building student phonemic awareness, graphophonic skills, and sight words in the context of whole text.

- *Fluent Decoding*

Primary outcome: Teachers learn strategies for supporting reading practice.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

Teachers learn comprehension strategies

through the Spelling, Reading, Writing, and Oral Language Components.

- *Linguistic Knowledge*
  Primary outcome: In addition to multiple word study strategies, teachers learn to develop students' spelling awareness and spelling strategies.

- *Background Knowledge*
  Primary outcome: Teachers learn to strategies for activating and building background knowledge through the Reading, Writing, and Oral Language, Components.

- *Making Inferences*
  Primary outcome: Through shared reading and shared writing in multiple texts, teachers support students in making inferences.

- *Self-Regulated Comprehending*
  Primary outcome: Teachers support students in developing awareness of strategies, strategy selection and evaluation.

Transaction with Text

Possible outcome: Though not specifically addressed, the dialog and discussion in the shared reading and writing activities foster transaction.

How does it support effective reading instruction?

Materials

First Steps® strategies and activities are applied to existing classroom materials.

Reading Task

The range of strategies and activities include those with authentic purposes and student choice. Because First Steps® is implemented across the curriculum, students transfer strategies to multiple contexts.

Instructional Approach

Students are taught strategies through explicit instruction. In the Developmental Continua, teachers have a tool for diagnostic instruction. Students work alternately in small groups, whole class, and independently. In their selection of materials, teachers have the opportunity for culturally responsive teaching.

Student Scaffolds

The strategies and activities include prereading, during reading and postreading.

Adaptability/Congruence with the Classroom Curriculum

Teachers apply and orchestrate strategies within the framework of the Developmental Continua. Most strategies can be implemented in the general education classroom,

How effective is it?

First Steps® for grades K–7 was independently researched and evaluated by the Australian Council of Educational Research. The Bank Street College of Education, New York, with support from the U.S. Department of Education, recently completed a three-year evaluation of the U.S. implementation of First Steps®. Progress reports have been made available but not the final report.

Rating: **Established**

Deschamp, P. (1996). The effects of First Steps® on learning. Education Department of Western Australia. http://www.first-steps.com/research.html

This evaluation included reports of the program's success with struggling readers from rural areas and of diverse culture and language, such as Aborigine populations. Deschamp concluded that First Steps® has had more success than any other professional development program in changing teacher knowledge and practice in ways to support to promoting student learning, especially for struggling students.

Freidus, H., McNamara, M., & Groseis, C. (1998). *First steps study: The year two progress report.* Bank Street College of Education.

This report, though not specifically on the middle school implementations, documents that teachers trained in First Steps® are able to implement the strategies. http://www.first-steps.com/bankst.html

Northwest Regional Educational Laboratory (1998). *Catalog of school reform models.* http://www.nwrel.org/scpd/natspec/catalog/index.html

First Steps® was selected by the Northwest Regional Educational Laboratory for its effectiveness as a research-based school reform model.

Where has it been implemented successfully?

Contact Heinemann Publishers for demonstration sites.

Multicultural Reading and Thinking (McRAT) Program

Publishers	Krista Underwood, Reading Program Manager Jane Dearworth, Literacy Specialist Arkansas Department of Education Room 401B, No. 4 Capitol Mall Little Rock, AR 72201
Web site	Not available
Telephone	501.682.4232 Fax: 501.682.4441
Background	McRAT supports teachers in developing student critical thinking through multicultural reading. Developed in the mid-1980s by reading and language arts teachers in the Arkansas Department of Education, McRAT has been implemented widely throughout the state and in several sites around the country.
Primary Outcomes	Transaction with Text, Motivation, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All readers, grades 3–8
Setting	Campus program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Teachers integrate culturally diverse themes into existing curricula and select appropriate materials for students to read. They help students connect reading with their lives outside of school.
Instructional Approach	Modeling, guided practice, independent practice; tutorial; culturally responsive teaching
Materials	Existing classroom materials
Cost	Approximately $100 per teacher. Trainers receive $500 per day.
Effectiveness	Promising

What is it? How does it work?

The Multicultural Reading and Thinking (McRAT) Program was developed in the mid-1980s by reading and language arts teachers in the Arkansas Department of Education. The program has been implemented extensively in Arkansas schools and in several additional sites around the country. McRAT fosters critical thinking skills in students, grades 3-8, in the context of reading and writing instruction. In particular, McRAT helps teachers to engage students through culturally responsive teaching.

Multicultural units or themes frame the instruction. A teacher delivers at least one weekly lesson that focuses on leading students to read beyond the literal levels of comprehension. Students learn to apply strategies for critical reasoning—such as analysis, comparison, inference/interpretation, and evaluation in multiple sources of information.

A notable feature of the McRAT program is the extensive McRAT professional development that takes place over a period of two years.

McRAT implementations have been successful with diverse student populations and in inclusion settings.

What professional development is required? What is provided?

Before implementing the program, teachers complete a course of study. For the first year of implementation teachers focus on teaching reasoning skills and evaluating student writing. In the second year, teachers work on collaboration with colleagues, curriculum development, and assessment.

McRAT is designed for certified teachers across the curriculum. A teacher becomes trained over a two-year period, which includes release time for professional development. The first year of training is for nine days plus follow-up sessions. The cost is about $100 per teacher, plus the release time for the training. Principals and other administrators are encouraged to attend at least three days of the training. McRAT trainers receive $500 per day for three to four trips. The number of new participants is limited to 150 each year. For six additional hours, a teacher may become a trainer.

How does it develop reading proficiency?

Primary Outcomes: Transaction with Text, Motivation, Background Knowledge; Making Inferences; Self-Regulated Comprehending

Motivation

Primary outcome: Teachers help students to engage their interest and understanding through the use of relevant themes and interesting multicultural materials.

Decoding

- *Basic Decoding*
  Not addressed.

- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*
  Not addressed.

- *Background Knowledge*
  Secondary outcome: Multicultural themes help students build knowledge. Specific strategies help students activate and connect what they know.

- *Making Inferences*
  Primary outcome: Students learn specific strategies for making inferences and interpretations.

- *Self-Regulated Comprehending*
  Primary outcome: Students gain metacognitive control of their reading as they successfully apply strategies for critical reasoning and evaluation in multiple sources of information

Transaction with Text

Primary outcome: Response strategies such as discussion and story retelling help students to transact with the text.

How does it support effective reading instruction?

Materials

Although existing classroom materials can be used, a wide range of authentic narrative and expository text will be needed to support the instruction. Texts should reflect diverse historical time periods, perspectives, and cultures.

Reading Task

The teacher controls the relevance of the reading task. Multicultural themes help readers apply the strategies across classes and beyond the classroom.

Instructional Approach

Students learn strategies from modeling by the teacher followed by guided and independent practice. Students respond to culturally responsive themes and materials, often through cooperative learning groups. They use inquiry to develop their thinking through writing. Portfolios document their understanding.

Student Scaffolds

Students engage prior knowledge before reading with themes. They are guided in transacting with text during reading. Postreading, they apply critical reasoning and thinking strategies.

Adaptability/Congruence with the Classroom Curriculum

Teachers select the reading materials that will be appropriate for their students. They must adapt and orchestrate the strategies in their classrooms. McRAT is designed to be applied across the curriculum.

How effective is it?

The McRAT Program has been studied by researchers who have been involved with the program.

Rating: Promising.

Hoskyn, J. (1992). *Multicultural Reading and Thinking: A three year report—1989-92.* (ERIC Document Reproduction Service No. ED 380 416)

Hoskyn, J. (1993, April) *Multicultural Reading and Thinking Program (McRAT).* Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA. (ERIC Document Reproduction Service No. ED 358 432).

Quellmalz, E. S., & Hoskyn, J. (1988). Making a difference in Arkansas: The Multicultural Reading and Thinking Project. *Educational Leadership, 45*(7), 52.

In 1999, McRAT was selected by the American Federation of Teachers to be included in *Seven Promising Programs for Reading and English Language Arts.* This document is available at http://www.aft.org/edissues/whatworks/seven/index.htm.

Where has it been implemented successfully?

Contact the Arkansas Department of Education for specific sites.

Project CRISS Program

Developers	Dr. Carol Santa and teachers in the Kalispell School District in Kalispell, MT, in 1979.
Publisher	Lynne Havens, Director Project CRISS 200 First Avenue East Kalispell, MT 59901
Web site	http://www.projectcriss.org
Telephone	408.758.6440 Email: criss@digisys.net
Background	Project CRISS (Creating Independence through Student-owned Strategies) helps secondary teachers engage students in effective behaviors for reading text across the content areas. A local facilitator provides ongoing support. It was developed in 1979 by Dr. Carol Santa and teachers in the Kalispell School District, Kalispell, MT.
Primary Outcomes	Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All secondary readers
Setting	Campus program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Adaptations have been made for ESL Students. A Spanish flip-book for parents has been developed.
Instructional Approach	Diagnostic instruction; modeling, guided practice, and independent practice; cooperative learning
Materials	Project CRISS uses the narrative and expository text used for regular classroom instruction.
Cost	Approximately $50 per teacher
Effectiveness	Promising

What is it? How does it work?

Project CRISS (Creating Independence through Student-owned Strategies) supports secondary teachers in teaching students a variety of strategies for reading text across the content areas. It was developed in 1979 by Dr. Carol Santa and teachers in the Kalispell School District, Kalispell, MT. These strategies engage students in the following effective reading behaviors:

Background Knowledge

Students learn to engage prior knowledge. Teachers learn to design instruction to help students use their knowledge to guide their own comprehension.

Elicit Active Reading, Listening, and Learning

Teachers are helped to engage students through reading and responding instead of lecturing and questioning. They learn to use strategies to elicit active reading.

Promote Discussion and Instructional Conversations

Through student-centered discussion, strategies, and meanings generated from reading are discussed and evaluated.

Encourage Metacognition

Students learn to fit their learning with background knowledge, to set learning goals, to choose and monitor strategies to fit those goals, and apply fix-up strategies.

Integrate Writing

Through strategies such as response entries, journals and logs, students consistently write to extend their understanding.

Understand Text Structure

Students learn to recognize and use text structure supports and to outline or map the text through selective underlining, power notes, and mapping.

Organize Information

Students learn to organize both narrative and expository text using guides, frames, and patterns.

Students build understanding of vocabulary through mapping and writing strategies.

Project CRISS has been adapted for ESL, gifted, and college-bound students, as well as for inclusion settings.

What professional development is required? What is provided?

In a two-day workshop, teachers are taught background theory of the project as well as teacher and student strategies. Teachers also learn to assess instructional objectives and student strategy use, to use rubrics and conduct effective parent communication, and to address district curriculum goals. During a follow-up in-service day, trainers evaluate the implementation. Teachers bring examples to share and administrators are encouraged to participate. After reviewing strategies, new ones are introduced. One teacher serves as the Local Facilitator who meets with teachers biweekly. Teachers learn to do action research on program effectiveness. Additional training support is available.

Costs involve release time for training and sharing; $50 per teacher trained; a fee for training, manuals, evaluation, and follow-up training; and an honorarium and expenses for trainers.

How does it develop reading proficiency?

Primary Outcomes: Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending

Transaction

Secondary outcome: Through various response strategies such as dialogue journals, students are led to reflect on experiences with the text.

Motivation

Secondary outcome: Motivation develops intrinsically as students have the freedom to select a strategy for a particular situation, monitor its effectiveness, and then adjust to another strategy as they work toward successful reading.

Decoding

- *Basic Decoding*
  Not addressed.

- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

  Primary Outcome: Students develop linguistic knowledge directly through Word Maps, Semantic Feature Analysis, and Sentence Synthesis and indirectly through Vocabulary Self-Selection.

- *Background Knowledge*

  Primary Outcome: Students learn to formulate questions for recalling what is known, using what has been recalled, determining what is needed, and deciding the focus for reading. The process is supported by families of strategies for mapping and summarizing.

- *Making Inferences*

  Primary Outcome: Students learn to recognize where they must infer and to determine the source of their inference. Supporting mapping strategies help them infer text structure, to add or change background knowledge, and to critique what has been read.

- *Self-Regulated Comprehending*

  Primary Outcome: Teachers guide students in a variety of metacognitive student-oriented strategies. The guidance continues through reflection with journaling, discussion and comparison of strategy effectiveness, and through student ownership of strategy selection, implementation, and evaluation. Students self-assess through setting goals for learning and creating portfolios to document their success.

How does it support effective reading instruction?

Materials

Students use the materials from their content classes. Materials are therefore authentic and likely to include both narrative and expository text.

Reading Task

Students determine the reading task. This authentic purpose strengthens the likelihood of strategy transfer across contexts.

Instructional Approach

After diagnostic instruction, the teacher introduces strategies using modeling, guided practice, and independent practice. Students practice strategies in cooperative groups with supported discussion.

Student Scaffolds

Students are taught to select and implement strategies before, during, and after reading, to evaluate the effectiveness of their choice, and to reselect if not appropriate.

Adaptability/Congruence with the Classroom Curriculum

Teachers across the curriculum apply Project CRISS in the context of regular classroom instruction. Project CRISS also supports literature-based reading programs. Teachers can adapt how they use the strategies in their classrooms.

How effective is it?

Project CRISS utilizes a sizable number of active reading strategies which have theoretical and research support. It has been implemented nationwide. Developer Carol Santa has reported on strategies used by Project CRISS in peer-reviewed scholarly publications.

Three in-house evaluation studies from 1993 through 1995 reported the performance of middle and high school students on a developer-designed posttest of delayed recall of reading comprehension. Project CRISS students performed significantly better than students in a matched control group or made significant gains over an unmatched control group. The project was validated for inclusion in the National Diffusion Network. There has not been an independent evaluation of the program.

Rating: **Promising**

Published studies about the Project CRISS Program include these:

Allen, R. (2000, Summer). Before it's too late: Giving reading a last chance. *ASCD Curriculum Update,*1–3,6–8.

Allen includes a report of the success of diverse secondary students in Miami-Dade County Public Schools in Florida that is attributed in part to Project CRISS implementation. *ASCD Curriculum Update* is not peer reviewed.

Pearson, J., & Santa, C. (1995). Students as researchers of their own learning. *Journal of Reading, 38*(6), 462–469.

Santa, C.M., Dailey, S. C., & Nelson, M. (1985). Free-response and opinion-proof: A reading and writing strategy for middle grade and secondary teachers. *Journal of Reading, 28*(4), 346–352.

Santa, C. M., & Havens, L. T. (1991). Learning through writing. In C. M. Santa & D. E. Alvermann (Eds.), *Science learning: Processes and applications.* Newark, DE: International Reading Association. (ERIC Document Reproduction Service No. ED 331 022).

Santa, C. M., & Santa, J. L. (1995). Teacher as researcher. *Journal of Reading Behavior, 27*(3), 439–451.

Where has it been implemented successfully?

The Project CRISS Web site provides names and contact information for facilitators across the country.

READ 180® Program

Publishers	Scholastic Books, Inc. 555 Broadway New York, NY 10012-3999
Web site	http://teacher.scholastic.com/read180/index.htm
Telephone	800.221.5312
Background	Read 180® provides a curriculum for the secondary reading classroom. Educators at Vanderbilt University in collaboration with Orange County, Florida, public schools, developed a successful prototype. The Scholastic Program was implemented in 1999.
Primary Outcomes	Motivation, Basic Decoding, Fluent Decoding, Background Knowledge, Self-Regulated Comprehending
Students	Struggling secondary readers
Setting	Classroom program Reading and Language Arts classes
Support for Culturally and Linguistically Diverse Readers	The program is available for Spanish language readers.
Instructional Approach	Modeling, guided practice, independent practice; whole group and small group learning
Materials	Student resources, including CD-ROM lessons, video clips, audiobooks, paperback novels, and teacher resources
Cost	Contact Scholastic Books for information
Effectiveness	Promising

What is it? How does it work?

Read 180® is a computer-supported program focused on building the reading fluency and comprehension of struggling secondary readers. The prototype was developed by Dr. Ted Hasselbring and the Peabody Learning Lab at Vanderbilt University with Orange Country, Florida, middle school readers. Scholastic Books adapted the program and made it available in 1999. There are five major components:

1. *Instructional reading:* Students read leveled, content-area passages. To build relevant background knowledge, they first view a video clip on CD-ROM, available in English or Spanish. Students are directed to skill lessons on word recognition, fluency, comprehension, vocabulary, and spelling. During reading, students can double click on any word to access a Spanish translation.
2. *Modeled reading:* Audiobooks allow students to follow text as a peer coach models fluent reading and self-regulated comprehending.
3. *Independent reading:* Students read independently from paperback novels appropriate to their reading level. There is limited opportunity for students to engage in group discussions of the literature.

4. *Teacher-directed Instruction:* Students and teachers interact daily through whole group and individualized instruction. Lessons provided to teachers include reading comprehension, word study, vocabulary, and writing.
5. *Assessment:* Read 180® utilizes the Lexile Reading Framework. Rather than yielding grade-level or norm-referenced scores, this tool describes the difficulty of reading material in terms of "lexiles." It assesses the level of text difficulty that a student is likely to comprehend. A computer management system tracks student performance on lesson quizzes.

A template shows teachers how to implement Read 180® in a 90-minute classroom block period. After whole group literacy instruction, students rotate in small groups through each of the major activities: instructional reading, modeled reading on audiobooks, independent reading of paperback novels, and teacher-led instruction.

What professional development is required? What is provided?

Read 180® requires a certified teacher who has some knowledge of reading instruction to lead whole class and small group activities. Teachers determine how they will conduct whole group instruction at the beginning and ending of the class, and how they will support students during the small group rotations.

The package for teachers includes an introductory video, resource guides, lesson plans, and a plan for organizing instruction around a 90-minute block class period. The Scholastic Books Web site provides additional links to materials. After two days of training in the use of the Read 180® computer programs, a campus has one year of telephone technical support.

Program costs cover setting up the entire program for up to 60 students, including staff training, computers, software, audiobooks, and paperbacks.

How does it develop reading proficiency?

Primary Outcomes: Motivation, Basic Decoding, Fluency, Background Knowledge, Self-Regulated Comprehending

Motivation

Primary outcome: The program aims to motivate students through multimedia materials on topics of interest to adolescents. It fosters student persistence through frequent, positive responses to student work. On CD-ROM, attractive peer mentors model the value of reading.

Decoding

- *Basic Decoding*

Primary outcome: Before reading an instructional text passage, students preview the text on CD-ROM that highlights difficult words. Students hear words pronounced, view a model of structural analysis, and take a quiz on their recognition of the words.

- *Fluent Decoding*

Primary outcome: Students follow in the text as a coach models fluent reading on an audiobook. Students practice repeated readings and make recordings of their oral reading.

Language Comprehension

Comprehension processes addressed:

- ☒ Making associations
- ☒ Predicting
- ☐ Generating questions
- ☒ Generating mental imagery
- ☐ Clarifying
- ☐ Elaborating
- ☒ Summarizing
- ☐ Rehearsing
- ☒ Evaluating

- *Linguistic Knowledge*

  Secondary outcome: Word study, including vocabulary definitions and spelling, are provided prior to reading instructional passages.

- *Background Knowledge*

  Primary outcome: On CD-ROM, a peer coach introduces a video clip, such as a news report, that is relevant to the instructional text. Students answer questions about what they have seen.

- *Making Inferences*

  Possible outcome: Students answer inferential level questions on comprehension quizzes for the instructional text.

- *Self-Regulated Comprehending*

  Primary outcome: A peer coach on audiobook models expert comprehension monitoring.

Transaction with Text

Secondary outcome: Students may engage emotions and experiences during independent reading of young adult literature. Peer coaches on audiobooks also model transaction.

How does it support effective reading instruction?

Materials

Students read materials at their instructional reading level, as determined by a placement test. The texts written for the instructional program are (a) high interest, content-related passages, (b) audiobooks (13 titles for grades 6 and above), and (c) paperback novels (10 titles written for each of four reading levels of reading difficulty).

Reading Tasks

The reading tasks are the successful completion of computer instructional modules, followed by modeled reading of audiobooks and independent reading of paperback novels. Students self-select from titles at their reading level. An authentic context is provided by small group rotations. To promote transfer of reading to new contexts, students must participate in all of the small group rotations.

Instructional Approach

The center of the program is the explicit tutorial instruction on CD-ROM. Diagnostic instruction is provided by the tutorial, with skill mastery information provided to the teacher. Before using the placement tests, users should check to ensure that the norms are appropriate.

Student Scaffolds

Students are helped in activating and building background knowledge and in previewing to promote fluency. During reading, an audiobook reading coach models comprehension and self-monitoring strategies used by good readers. Teachers provide postreading scaffolds during teacher-led whole and small group instruction.

Adaptability/Congruence with the Classroom Curriculum

Teachers determine how they will conduct whole group instruction at the beginning and end of the class, and how they will support students during small group rotations. The program provides an instructional plan organized for a 90-minute block class period. Read 180® is designed to be the curriculum within a reading or language arts classroom.

How effective is it?

The first year of implementation for Read 180® was 1999-2000. Evaluation data for the Scholastic Read 180® program is being collected in schools in the United States and in Department of Defense schools in Germany. There has been no independent evaluation of the program.

***Rating:* Promising**

Hasselbring, T. S., Goin, L. I., Taylor, R., Bottge, B., & Daley, P. (1997). The computer doesn't embarrass me. *Educational Leadership, 55*(3), 30-33.

The prototype program developers report quantitative and qualitative data documenting its effectiveness. Scholastic Books, which adapted and published the program, reports that it has been successfully implemented in several locations beyond the pilot. The prototype program was implemented with struggling middle school readers in Orange County Public Schools, Florida, beginning with the 1994-95 school year. It was implemented in the context of a major literacy project. Students with reading and writing difficulties were allocated two-hour time blocks for daily literacy instruction. Classes were limited to 20 students with five computers per class. Teachers trained in literacy instruction used a workshop approach to the development of reading, writing, speaking, and listening, in addition to the computer support. Students made significant improvement on the Stanford Diagnostic Reading Test, the Culture-Free Self-Esteem Inventory, and the Test of Written Spelling. Qualitative data included interviews with students about the program, who responded positively. These components, in addition to the program software, contributed to the project success.

Where has it been implemented successfully?

Representatives from the pilot project are featured on the Scholastic Read 180® Web site. Contact Scholastic Books for additional sites.

READ RIGHT Program

Publishers	READ RIGHT Systems 310 West Birch, Suite 2 Shelton, WA. 98584
Web site	http://www.readright.com
Telephone	360.427.9440 Fax: 360.427.0177 email: readright@compuserve.com
Background	READ RIGHT focuses on developing reading fluency. Developed by Dr. Dee Tadlock, it was first successful in workplace settings and has been implemented in secondary schools since 1993.
Primary Outcomes	Fluent Decoding, Background Knowledge
Students	Struggling secondary readers
Setting	Campus program Reading and Language Arts classes
Support for Culturally and Linguistically Diverse Readers	Implemented successfully with bilingual and ESL populations
Instructional Approach	Diagnostic instruction; modeling, guided practice independent practice; tutorial
Materials	All student materials, including a library of recorded books, and teacher resources
Cost	$73,000 for materials and training for the first year
Effectiveness	Promising

What is it? How does it work?

READ RIGHT is a program for developing fluency in elementary through adult readers. Groups of three students work daily with a trained READ RIGHT tutor for 45 minutes. The program goal is to produce "excellent readers" who read aloud smoothly and with intonation, much like oral speech. Although the developers present the program in terms of current brain research, its three strategies are supported by research in reading.

1. In *Excellent Reading*, students read along while listening to an audiotape, modeling fluent reading text that is at their instructional level. After silent rereadings, a student signals readiness to read aloud to the tutor. If needed, the tutor prompts the student to predict a problem word and then teaches it as a vocabulary word if the student still cannot decode it.
2. In *Coached Reading*, students read aloud a passage of unfamiliar text. A tutor provides specific, individualized feedback.
3. For *Pleasure Reading*, students practice reading in books at their independent level of readability. They choose from titles that have been selected from publishers to be included in the READ RIGHT library.

The program has been implemented with students classified as having dyslexia, developmental disabilities, and attention deficit hyperactivity disorder (ADHD). It has also been implemented with bilingual and ESL programs.

What professional development is required? What is provided?

The center of the program is the READ RIGHT tutor. One tutor can serve approximately 28–35 students each school year.

To become a tutor requires certification, but a teaching credential is not a prerequisite. Certification results from training in the theoretical constructs of the program and competence in working with a wide range of students, performing assessments and interim analyses, and correctly determining time for student advancement and graduation. Certification as a trainer reflects the ability to train tutors and to use the theory to solve problems that arise in tutoring.

The costs include start-up, training visits, off-site support, travel expenses, the READ RIGHT library of recorded books, and support materials. All materials required for program implementation are provided. Contact the READ RIGHT office for prices.

How does it develop reading proficiency?

Primary Outcomes: Fluency, Background Knowledge

Motivation

Secondary outcome: Users report that students become more self-confident and interested in school as they experience success in reading aloud more challenging text.

Decoding

- *Basic Decoding*

Secondary outcome: When reading aloud, students who encounter a word they cannot decode are asked to predict from context. If they cannot, the word is presumed not to be in their oral vocabulary and its definition is taught immediately.

- *Fluent Decoding*

Primary outcome: To build fluency, students are taught a repeated reading strategy. They listen to a model of fluent reading of text that is at their instructional level as they follow along with the printed text. They reread silently until they feel ready to read aloud. Students then read aloud a passage of unfamiliar text. At both steps, the tutor provides specific, individualized feedback. Students are taught to read aloud as if they are speaking the words in conversation. In this way, decoding is connected to meaning.

Language Comprehension

Comprehension processes addressed:

☐ **Making associations**
☒ **Predicting**
☐ **Generating questions**
☐ **Generating mental imagery**
☒ **Clarifying**
☐ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☐ **Evaluating**

- *Linguistic Knowledge*

Secondary outcome: Students are taught word meanings if they are unable to predict a word from context when reading aloud.

- *Background Knowledge*

Possible outcome: Students can be

expected to build some background knowledge as a result of reading authentic texts.

- *Making Inferences*

  Possible outcome: Trained tutors ask students to summarize their understanding by retelling what has been read. Tutors may teach critical thinking skills in small groups

- *Self-Regulated Comprehending*

  Possible outcome: During the third stage of a session, students select and read books from the READ RIGHT library that are at their independent reading level.

Transaction with Text

Secondary outcome: Students may engage emotions and experiences during independent reading of young adult literature.

How does it support effective reading instruction?

Materials

Books are selected from publishers for quality and appropriateness of content and then recorded. Grade level is calculated using standard quantitative (but not qualitative) readability formulae. Students use the recorded texts for repeated readings.

Reading Task

Students read aloud in progressively more complex text. They read independently from leveled books chosen from the READ RIGHT library. The use of authentic text promotes transfer of fluency to other settings.

Instructional Approach

Students receive diagnostic instruction through small group tutorial sessions led by a trained tutor.

Student Scaffolds

The program supports students in building fluency during reading. It does not address prereading or postreading comprehension.

Adaptability/Congruence with the Classroom Curriculum

READ RIGHT is designed to be implemented within the reading class or as a pull-out program. The sequence of strategies must be followed, although tutors are expected to be instructional decision makers when working with students.

How effective is it?

READ RIGHT reports implementation with 2,358 students since 1996, after a pilot in 1993. The developers monitor project implementations by monthly collection and analysis of student activity data sheets. When requested by the school, READ RIGHT consultants administer the Degrees of Reading Power Test (DRP) to establish individual student baselines, to measure growth, and for project evaluation. Using the DRP (or other standardized measure of reading), developers report one grade-level advancement for every 13 hours of tutoring for high school students and for every 18 hours of tutoring for middle school students. The developer supplies data and reports of program effectiveness. There has been no formal independent evaluation of the program.

Rating: Promising

An evaluation of the program was conducted at Hillside Junior High School, Boise, Idaho, where READ RIGHT was implemented with 200 struggling readers from 1998 through 2000. Their average gain on comprehension as measured by the Woodcock Johnson Reading Test was 20 percentiles after two semesters in the READ RIGHT program.

Where has it been implemented successfully?

The READ RIGHT Web site provides a list of secondary schools where READ RIGHT has been implemented.

Reading Power in the Content Areas (RP)

Developers	Roy J. Butz in 1972, for grades 9–12.
Publisher	Carol Burgess, Program Representative CB Consulting Services 16705 12th Avenue North Plymouth, MN 55447
Web site	Not available
Telephone	763.404.1010 Email: burge003@tc.umn.edu
Background	RP is designed to help teachers of general as well as vocational education classes engage students in effective behaviors for reading text across the content areas. Teachers develop a Teaching Outline to help them integrate the reading strategies with their instruction.
Primary Outcomes	Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All secondary readers
Setting	Campus program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	RP has been successfully implemented in diverse school settings with CLD student populations.
Instructional Approach	Diagnostic instruction; modeling, guided practice, and independent practice; cooperative learning
Materials	The narrative and expository text used for regular classroom instruction.
Cost	Minimum cost ranges from $200–$400
Effectiveness	Promising

What is it? How does it work?

Reading Power in the Content Areas (RP) is designed help general education and vocational education teachers improve the content reading of secondary-level students through sound assessment and instructional strategies. It was developed by Roy Butz in 1972 for grades 9–12.

RP aims to address the needs of both student and teacher. Student needs addressed include: (1) the need to narrow the gap between reading ability and the reading required for accessing instructional materials and (2) the need to increase general reading comprehension skills, including vocabulary acquisition and study skills. Teacher needs addressed include the need to enrich knowledge, attitudes, and skills relating to the use of textbooks and reading-related activities used for instruction. RP has four components:

1. *In-service training* includes assessment of teacher attitudes toward reading and of the extent to which they use scaffolding

to support reading assignments. Teachers learn assessment techniques, the limits of readability levels, and the usability of textbooks.

2. In the *student assessment* component teachers learn to assess student reading ability through multiple measures. In addition to learning how to interpret standardized reading tests, teachers learn a variety of informal tests, such as sight and content-specific vocabulary assessments, "cloze" tests (the reader relies on context to supply words deleted from a passage), and informal reading inventories.
3. In the vocabulary development component teachers learn the importance of background experience and motivation to vocabulary learning. They acquire techniques for increasing student vocabulary skills in specific content areas, such as how to select vocabulary words that will enhance the reading of the text.
4. The *comprehension/thinking skills* component teaches how to scaffold reading throughout the reading process, so that students can become active and independent readers.

RP also helps teachers to structure a Teaching Outline for classroom implementation of the strategies.

What professional development is required? What is provided?

RP training is recommended as a campuswide program for both general teachers as well as vocational teachers that is overseen by a reading specialist. Teaching Outlines designed during in-service training require considerable time and thought, but they help teachers to implement the strategies. Additional in-service training helps to scaffold teachers as they integrate the reading strategies with their instruction.

RP provides all instructional materials and student assessments. Ongoing in-service supports the implementation of the teaching outline designed during the training.

Initial costs for training at a school site are less than $400. Contact the RP office for specific information.

How does it develop reading proficiency?

Primary Outcomes: Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending

Transaction

Possible outcome: With strategic approaches to gain access to text, and with teacher support, students can begin to respond with their own emotions and experiences.

Motivation

Secondary outcome: As students gain proficiency in strategic reading their success and satisfaction can lead to persistence and a valuing of reading. RP helps teachers to capitalize on student curiosity and reasons for reading.

Decoding

- *Basic Decoding*
  Not addressed.

- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

  Primary outcome: Teachers acquire information regarding language development and learn to teach content-specific terms. Structured Overviews help students relate new vocabulary to content. Structure Diagrams foster understanding of text structure.

- *Background Knowledge*

  Primary outcome: Teachers apply strategies for activating and building background knowledge, including PreP (a background knowledge strategy described in this *Guide*) and Graphic Organizer/Concept Mapping.

- *Making Inferences*

  Primary outcome: By guiding students in critical reading, teachers help students make associations and clarify understanding using mapping and outlining strategies.

- *Self-Regulated Comprehending*

  Primary outcome: Teachers guide students in a variety of metacognitive student-oriented strategies. Students generate questions, summarize, and evaluate in Active Reading and Study Skills Instruction.

How does it support effective reading instruction?

Materials

The teacher selects content-appropriate expository or narrative text, including textbooks and trade books. As teachers learn to assess reading levels of texts and to scaffold assignments for increasing readability, they become better prepared to select materials that align with student skills and interests.

Reading Task

Teachers use the content-area reading strategies across the curriculum; this practice supports the authenticity of the instruction and its transfer to multiple settings.

Instructional Approach

Teachers learn to assess reading and study skills and to gain diagnostic information through student responses during teaching. They learn explicit instruction techniques of modeling, guided practice, and independent practice for teaching students reading strategies. Teachers also learn approaches to cooperative learning.

Student Scaffolds

Teachers learn strategies for scaffolding students prereading, during reading, and postreading.

Adaptability/Congruence with the Classroom Curriculum

RP provides assessment tools and strategies for teachers to implement in various content areas. Teachers are encouraged to adapt the program for their own classrooms and students.

How effective is it?

RP utilizes a sizable number of active reading strategies which have theoretical and research support. Evaluation studies conducted by RP found that secondary students from diverse populations in an RP implementation made significant gains on standardized tests of reading comprehension when compared with a control group. RP was validated for inclusion in the National Diffusion Network. No independent program evaluation has been done.

Rating: Promising

RP was selected for inclusion in this *Guide* based on its reports of effectiveness with middle school students and its sound professional development component.

Below is one available assessment of RP:

Killion, J. (1997). *What Works in the Middle.* National Staff Development Council. http://www.nsdc.org/

Where has it been implemented successfully?

RP provides these two sites:

Manhattan High School
Contact: Mickey Bogart
Kansas State University
College of Education
Bluemont Hall 246
Manhattan, KS 66506
Telephone: 785.532.5904
mbogart@ksu.edu

Will C. Wood Middle School
Contact: Frank Lewallen, Reading Specialist
6201 Lemon Hill Avenue
Sacramento, CA
Telephone: 916.382.5900

Strategic Instruction Model (SIM) Program

Sponsors	Coordinator of Professional Development, Center for Research on Learning (CRL) University of Kansas 521 Joseph R. Pearson Hall 1122 West Campus Road Lawrence, KS 66045
Web site	http://www.ku-crl.org/htmlfiles/sim.html
Telephone	785.864.0622
Background	A system of learning strategies for students with learning disabilities and teacher instructional strategies. It has been developed over a period of twenty years by researchers at the University of Kansas Center for Research on Learning.
Primary Outcomes	Basic Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	Struggling secondary readers
Setting	Campus program General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	The inclusion of authentic, multicultural materials can help CLD readers respond to reading through SIM.
Instructional Approach	Modeling, guided practice, independent practice; cooperative learning
Materials	Expository content-area text used for regular classroom instruction.
Cost	Contact the sponsors for information
Effectiveness	Well established

What is it? How does it work?

The Strategic Instruction Model (SIM) is a system of student learning strategies (called the Learning Strategies Curriculum) and teacher instructional routines (called Content Enhancement). SIM was developed over a period of twenty years at the University of Kansas to support students with learning disabilities. Increasingly it is being adopted by general education teachers to help them work with their struggling readers. Two of the seven strands of the Learning Strategies Curriculum, the Acquisition Strand and the Storage Strand, apply specifically to reading. The Acquisition Strand consists of four reading strategies, which can be implemented separately.

1. The *Word Identification Strategy* was developed by B. Keith Lenz to help students decode unknown words while reading of content-area texts. The strategy teaches students to predict meaning from context and to use word analysis.
2. The *Paraphrasing Strategy* teaches students to read a limited section of material, to determine main idea and details, and to express the meaning in their own words.

3. The *Self-Questioning Strategy* teaches students to construct questions about key pieces of information in a passage and then to read for answers.
4. The *Visual Imagery Strategy* teaches students to visualize the scene that is described, incorporating actors, action, and details. They learn and practice in short passages. The strategy is designed to improve their learning and recall of prose material.

The Storage Strand includes strategies for learning during reading. The *Vocabulary Strategy* teaches students to apply key-word mnemonics to create associations among the critical elements of a concept, visual imagery, and their prior knowledge. Students create a study card to help them extend comprehension and recall.

SIM further supports teachers through 11 *Content Enhancement Routines*. The routines are instructional strategies for opening, planning, and managing a class, as well as reading tasks, and to teach concepts. The routines aid general education teachers with mixed ability classrooms.

What professional development is required? What is provided?

Initial training of teachers in the SIM must be conducted by a certified SIM trainer who has completed the program at the Center in Lawrence, Kansas. Schools can access an extensive nationwide network of SIM trainers. The trainer meets with as many as 25 teachers for 3–6 hours per strategy. Each teacher who is implementing the strategies uses an instructor's manual. Teachers practice the strategy in their classrooms followed by debriefing and problem-solving sessions. The Lawrence, Kansas, Center offers a summer schedule of workshops for teachers.

Teachers may become certified as a SIM trainer, a process that takes about three years and includes an apprenticeship with a seasoned SIM trainer.

How does it develop reading proficiency?

Primary Outcomes: Basic Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending, Transaction with Text

Motivation

Secondary outcome: Because the strategies enable independent reading, students who successfully apply them likely will be motivated by their success to persist in the reading task.

Decoding

- *Basic Decoding*

Primary outcome: In the Word Identification Strategy students predict meaning from context and to use word analysis skills with unknown words during reading.

- *Fluent Decoding*

Secondary outcome: Fluent decoding is fostered by supported reading practice

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

  Primary outcome: The Word Identification Strategy builds student knowledge of word affixes and roots. The Vocabulary Strategy develops word knowledge through multiple associations.

- *Background Knowledge*

  Primary outcome: The Content Enhancement Routines support teachers in developing student concept knowledge. The Word Identification Strategy and Vocabulary Strategy guide students in activating and connecting their background knowledge.

- *Making Inferences*

  Primary outcome: The Paraphrasing Strategy teaches students to translate the meaning of a passage into their own words. The Visual Imagery Strategy involves students in making inferences through visualizing the events of a text.

- *Self-Regulated Comprehending*

  Primary outcome: The Self-Questioning Strategy requires students to predict relevant questions about what is important and to read for the purpose of answering questions they have generated.

Transaction with Text

Secondary outcome: Implementing the strategies with the peer support of small groups can contribute to affective engagement in the reading task.

How does it support good reading instruction?

Materials

The strategies are implemented in materials selected and provided by the teacher. Most often these assignments will be expository text (such as textbooks) written at the students' instructional level.

Reading Task

With the support of trained teachers, students can transfer the strategies from the reading class to the general education classroom.

Instructional Approach

Students are taught the strategies through modeling, guided practice, and independent practice. They learn the strategies in a small group setting. In the context of a general education class, a small group of students can be pulled aside for strategy instruction.

Student Scaffolds

The four strategies—Word Identification, Paraphrasing, Self-Questioning, and Visual Imagery—are implemented during reading. The Vocabulary Strategy may be implemented prereading or postreading. Teachers will need to provide additional scaffolds for students before and after reading. Some of those scaffolds may be provided by the teacher's use of Content Enhancement Routines.

Adaptability/Congruence with the Classroom Curriculum

The content enhancement routines are designed to be used by regular classroom teachers for general instruction. The strategies can be taught through flexible grouping. Although steps for the strategies and routines are clearly defined, teachers select the materials and contexts to which they are applied.

How effective is it?

The Strategic Instruction Model has been extensively researched.

Rating: **Well established**

The following references were provided by the Center for Research on Learning as representative support for using SIM with struggling secondary readers. Additional documentation can be found at the Center's Web site: http://www.ku-crl.org/htmlfiles/articles/article-1.html#ls.

Content Enhancement References

Bulgren, J. A., Deshler, D. D., & Schumaker, J. B. (1997). Use of a recall enhancement routine and strategies in inclusive secondary classes. *Learning Disabilities Research & Practice, 12*(4), 198–208.

Trained teachers and their students were better able to use the mnemonic device than a control group.

Bulgren, J. A., Schumaker, J. B., & Deshler, D. D. (1988). Effectiveness of a concept teaching routine in enhancing the performance of LD students in secondary-level mainstream classes. *Learning Disability Quarterly, 11*(1), 3–17.

Concept Diagrams and Concept Teaching Routines were used in nine secondary classrooms with 36 students with learning disabilities. Teachers identified target concepts and implemented the teaching routine, while students gained in concept acquisition, note-taking skills, and regular test performance.

Bulgren, J. & Scanlon, D. (1997/98). Instructional routines and learning strategies that promote understanding of content area concepts. *Journal of Adolescent & Adult Literacy, 41*(4), 292-302.

Through a sample content lesson, the authors present an integrated strategy approach based upon the SIM. It employs a concept diagram and comparison table strategies. Students learn to independently enhance their content learning by applying a strategy called ORDER.

Learning Strategies References

Clark, F. L., Deshler, D. D., Schumaker, J. B., Alley, G. R., & Warner, M. M. (1984). Visual imagery and self-questioning: Strategies to improve comprehension of written material. *Journal of Learning Disabilities, 17*(3), 145–149.

Two learning strategies, Visual Imagery and Self-Questioning, designed to increase reading comprehension were taught to six learning disabled students using a multiple baseline across strategies design on several outcome measures.

Deshler, D. D., & Lenz, B. K. (1989). The strategies instructional approach. *International Journal of Disability, Development, and Education, 36*(3), 203–224.

This article describes how researchers have developed the Strategic Intervention Model to promote, model, guide, and prompt efficient, effective learning and performance across all settings for all students, not just those with learning disabilities.

Deshler, D. D., & Schumaker, J. B. (1988). An instructional model for teaching students how to learn. In J. L. Graden, J. E. Zins, and M. J. Curtis (Eds.), *Alternative educational delivery systems: Enhancing instructional options for all students.* Washington, DC: National Association of Secondary School Principals, 391–411.

The Strategies Intervention Model is described from several dimensions: evolution and overview, key components, teachers' roles, students' roles, and the external support sources.

Lenz, B. K., & Hughes, C. A. (1990). A word identification strategy for adolescents with learning disabilities. *Journal of Learning Disabilities, 23*(3), 149–158, 163.

Twelve adolescents with learning disabilities who were taught the Word Identification Strategy (DISSECT) made significant gains in word identification but inconsistent gains in comprehension.

Katims, D. S. & Harris, S. (1997). Improving the reading comprehension of middle school students in inclusive classrooms. *Journal of Adolescent & Adult Literacy, 41*(2), 116-123.

In this study of 207 middle school students of mixed abilities,an experimental group was taught an adaptation of the SIM paraphrasing strategy called RAP. The students attended a school that was 89% Mexican American in population and located in a lower socioeconomic area. A significant effect was found for the RAP intervention. The students using RAP gained 17% from pre- to posttest compared to students using the traditional instruction, who gained 3.5%.

Where has it been implemented successfully?

SIM has been implemented in thousands of schools across the country. Contact the Center for Research on Learning at the University of Kansas for specific sites.

Student Team Literature (STL) Program

Sponsors	Contact: Douglas Mac Iver, Principal Research Scientist, dmaciver@csos.jhu.edu Center for Research on the Education of Students Placed at Risk (CRESPAR) Johns Hopkins University 3003 N. Charles Street, Suite 200 Baltimore, MD. 21218-3888
Background	STL is designed to develop the reading abilities of struggling students through good literature. Student Team Literature is an adaptation of Student Team Reading, developed by Robert Stevens in 1989.
Web site	http://www.csos.jhu.edu/Talent/InstructionalPrograms.htm#reading
Telephone	410.516.8829
Primary Outcomes	Motivation, Fluency, Linguistic Knowledge, Making Inferences, Background Knowledge, Self-Regulated Comprehending
Students	Struggling middle school readers
Setting	Campus program Language Arts and Reading classes
Support for CLD Readers	The original program was developed in urban classrooms and has been implemented since then with Spanish language, ESL, and culturally diverse populations
Instructional Approach	Modeling, guided practice, independent practice;cooperative learning; inductive learning; and culturally responsive teaching
Materials	Authentic novels
Cost	Contact CRESPAR for information
Effectiveness	Promising

What is it? How does it work?

Student Team Literature (STL) was designed to enhance middle school students' motivation to learn while improving their reading comprehension and understanding of good literature. Student Team Literature is an adaptation of Student Team Reading, developed by Robert Stevens in 1989. STL uses award-winning novels, higher-order thinking activities, and cooperative learning to create a motivating environment for reading. It is part of a comprehensive school reform model, Talent Development Middle School (TDMS) being developed at John Hopkins University. TDMS has been implemented in 21 schools. However, a school may elect to implement STL without TDMS.

STL teachers introduce novels with discussions of relevant background knowledge, genre, and vocabulary. Students work in cooperative learning teams as they read. Activities include:

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1. *Partner Reading.* Students read silently first, then take turns reading orally with a partner.
2. *Treasure Hunts.* Students are given higher-order questions to guide their reading and must search and think in order to generate text-supported answers.
3. *Word Mastery.* Students practice saying new vocabulary words with their partners and write context clue sentences using new vocabulary.
4. *Story retelling.* Students summarize stories in their own words.
5. *Story-related writing.* Students write in response to prompts about their reading.
6. *Extension activities.* Students complete cross-curricular research, fine arts, dramatics, and media activities as they explore themes in the books.
7. *Tests.* Students take tests on comprehension, word meaning, and oral reading.
8. *Explicit instruction of comprehension strategies.* Teachers models and guide students in comprehension and metacognitive checking strategies.

Students work in pairs and in heterogeneously mixed groups of four to five. They receive rewards for working well both as an individual and as a group member.

What professional development is required? What is provided?

Student Team Literature requires extensive teacher training and development. Reading/Language Arts teachers attend two days of training in the summer and meet monthly during the school year to refine their instruction and troubleshoot problems. They are observed by trainers and receive feedback on improving their teaching.

Information on costs and materials is not available at this time.

How does it develop reading proficiency?

Primary Outcomes: Motivation, Fluency, Linguistic Knowledge, Making Inferences, Background Knowledge, Self-Regulated Comprehending

Motivation

Primary outcome: STL is designed to build motivation to learn by incorporating research-based cooperative teaming activities, by using authentic literature, and through the challenge and support of higher-order thinking.

Decoding

- *Basic Decoding.*

Possible outcome: Students work on oral reading and receive coaching from their teachers and peers on learning to say and use new words.

- *Fluent Decoding.*

Primary outcome: Students engage in partner reading and in oral practice of new words.

Language Comprehension

Comprehension processes addressed:

☒ Making associations
☒ Predicting
☒ Generating questions
☒ Generating mental imagery
☒ Clarifying
☒ Elaborating
☒ Summarizing
☒ Rehearsing
☒ Evaluating

- *Linguistic Knowledge*

Primary outcome: The Word Mastery component helps students develop skill in learning new words through context as well as through structural analysis.

- *Background Knowledge*

  Primary outcome: Teachers help students activate and build background knowledge prior to reading. Increased reading and response to reading also supports the building of background knowledge.

- *Making Inferences*

  Primary outcome: Explicit strategy instruction and questions during reading help students build skill in making inferences.

- *Self-Regulated Comprehending*

  Primary outcome: Students receive instruction and practice in using metacognitive checking.

Transaction with Text

Possible outcome: Students are reading literature and discussing it with peers, which provides a rich opportunity for transaction. Student aesthetic response will hinge on the content of the writing prompts, the quality of the teacher interaction during story retelling, and the structure of the extension activities.

How does it support effective reading instruction?

Materials

Students read quality literature (novels) which may prove to meet their interests as well as purposes for reading. Reading levels vary among the novels.

Reading Task

In reading and responding to quality literature, students are provided with an authentic and potentially meaningful reading task. Task relevance is strengthened by extension activities that make connections to other disciplines.

Instructional Approach

Teachers provide explicit strategy instruction through modeling, guided practice, and independent practice. Students also engage in inductive learning as they construct meaning from the books they read and conduct inquiry projects during extension activities. They work in cooperative pairs and small teams.

Student Scaffolds

Each stage of reading is supported by the teacher, by peers in cooperative learning groups, and by the activities that guide readers to develop comprehension.

Adaptability/Congruence with the Classroom Curriculum

STL is designed to be the curriculum for Reading and Language Arts classes. Teachers follow a structured approach, with limited opportunity for adaptation. Connections are made to other classes through research projects that are interdisciplinary in scope. Skills developed in reading can transfer to learning tasks in those other classes, especially if those teachers support STL strategies in implementing the interdisciplinary projects.

How effective is it?

The Center for Research on the Education of Students Placed at Risk (CRESPAR), which adapted and now sponsors the program, has successfully implemented it in several locations beyond the pilot. Evaluation data shows significant improvement in students' reading scores and in their motivation to learn. There has been no independent evaluation of the program.

Rating: Promising

Mac Iver, D. J., & Plank, S. B. (1996). *The Talent Development Middle School. Creating a motivational climate conducive to talent development in middle schools: Implementa-*

tion and effects of Student Team Reading. (ERIC Document Reproduction No. ED 402 388)

The program was found to be effective with ESL students.

Mac Iver, D., Plank, S., & Balfanz, R. (1997, August). *Working together to become proficient readers: Early impact of the Talent Development Middle School's Student Team Literature, Report No. 15.* Baltimore, MD: Center for Research on the Education of Students Placed at Risk, Johns Hopkins University and Howard University.

Stevens, R. J., & Durkin, S. (1992). *Using Student Team Reading and Student Team Writing in middle schools: Two evaluations.* (*ERIC* Document Reproduction No. ED 350 594)

Program developers report the success of pilot of Student Team Reading and Student Team Writing with inner-city middle schools in 1989–91. Both quantitative and qualitative data were reported.

Where has it been implemented successfully?

Successful Student Team Literature sites include: Roberto Clemente Middle School, Jay Cooke Middle School, and Central East Middle School, all in Philadelphia, PA.

Wilson Reading System (WRS)

Developers	Barbara A. Wilson
Publishers	Wilson Language Training Corporation 175 West Main Street Millbury, MA 01527-1441
Web site	http://www.WilsonLanguage.com
Telephone	508.865.5699 Fax: 610.565.3872
Background	Originally designed as a dyslexic training program for adults by Barbara Wilson, an Orton-Gillingham teacher, WRS follows the Orton multisensory approach.
Primary Outcomes	Basic Decoding, Fluency, Linguistic Knowledge
Students	Struggling secondary readers with decoding problems who are reading at second grade level and above
Setting	Classroom program Reading classes
Support for Culturally and Linguistically Diverse Readers	Teachers should use WRS in the context of a full literacy program that addresses the needs of CLD readers.
Instructional Approach	Modeling, guided practice, independent practice; diagnostic instruction; inductive learning; cooperative learning
Materials	Some teacher and student materials provided
Cost	$300 per classroom
Effectiveness	Promising

What is it? How does it work?

WRS targets secondary students with severe decoding and spelling difficulties. Originally designed as a dyslexic training program for adults by Barbara Wilson, an Orton-Gillingham teacher, WRS follows the Orton multisensory approach. The program focuses on teaching the concepts of the structure of words. Instruction takes place at least twice a week, usually one-to-one or in small groups.

The individually administered Wilson Assessment of Decoding and Encoding (WADE) places students in the program along a scale of 12 sequential steps. These steps, based on six common syllable types, begin with sound segmentation, syllabication, and suffixes and proceed through more complex language concepts and spelling rules. The multisensory instruction involves students in finger tapping to segment sounds and manipulating cards to internalize sounds, syllables, and suffixes.

A 10-part lesson plan drives the instruction. Parts 1–5 focus on decoding, parts 6–8 on encoding (spelling). In part 9, students silently read short passages with controlled vocabularies, visualize the passage, retell, then read orally. In part 10, students listen as the teacher models by reading aloud a more difficult noncontrolled passage, after which students visualize and then retell.

In program steps 1–6, students read highly controlled text passages. At about step 7 most are expected to successfully read noncontrolled text from outside readings. The one-to-one approach can be expanded to small groups of students with similar levels of decoding ability.

The WRS is not a complete literacy program. The teacher is expected to provide support for comprehension and writing.

What professional development is required? What is provided?

Trainers from Wilson Language Training Corporation will visit a school to conduct a two-day overview training workshop. Without this training, teachers can implement the program by reading the instructor manual, watching the six videotapes (approximately 70 minutes each), preparing lesson plans, and if possible, observing Wilson teachers.

Teachers may pursue three levels of advanced training, leading to certification as a Wilson trainer.

Teacher materials include: instructor manual, syllable cards, sound (phoneme) cards, word cards, video supplements to training, dictation books, rules notebooks, group sound cards, and an assessment tool. Student materials include student readers, student workbooks, stories for students, and a chapter book.

The program cost for all 12 steps is $300 per classroom.

How does it develop reading proficiency?

Primary Outcomes: Basic Decoding, Fluency, Linguistic Knowledge

Motivation

Secondary outcome: Students placed appropriately in the program are expected to be engaged by the interactive and quickly paced instruction and varied activities. The experience of successful decoding, recorded on daily charts, is motivating to these students who have been unsuccessful decoders.

Decoding

- *Basic Decoding*

Primary outcome: Students can develop phonemic awareness and basic letter-sound correspondences, although most secondary readers will start later in the sequence of steps. Concepts of phoneme segmentation, syllables, and suffixes are taught and then applied to the reading and writing of single words. Students then apply the decoding skill to sentences and passages controlled for the elements taught. Students review irregular sight words on flash cards.

- *Fluent Decoding*

Primary outcome: Students read passages with a controlled vocabulary, first silently, then orally. WRS provides phonetically controlled readers for additional fluency practice.

Language Comprehension

Although differentiated by its focus on word recognition and spelling, WRS should be part of a full literacy program to build comprehension.

- *Linguistic Knowledge*

Primary outcome: Students are taught language concepts, word parts, word meanings at two levels of difficulty, and spelling rules.

- *Background Knowledge*

Not addressed.

- *Making Inferences*

  Possible outcome: Students are taught to visualize the meaning of a story before retelling it.

- *Self-Regulated Comprehending*

  Possible outcome: When students make oral reading errors, the teacher asks questions to prompt self-correction. However, students do not learn a self-questioning strategy. Students learn a model for documenting their classroom experience by maintaining a notebook of linguistic rules.

Transaction with Text. Not addressed.

Comprehension processes addressed:

☐ **Making associations**
☐ **Predicting**
☐ **Generating questions**
☒ **Generating mental imagery**
☐ **Clarifying**
☐ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

How does it support effective reading instruction?

Materials

WRS provides instructional reading materials written to control for decoding complexity and vocabulary difficulty. Outside materials are used to move students from controlled to uncontrolled text.

Reading Task

Students move from reading highly controlled text to passages that are not controlled. This process supports transfer of decoding strategies.

Instructional Approach

The lesson cycle includes explicit instruction through modeling, guided practice, and independent practice, as well as inductive learning in which students derive meanings from reading practice. Student responses from oral reading and retelling allow the teacher to assess student performance and adjust instruction.

Student Scaffolds

Students begin the lesson sequence with silent reading. They are supported by decoding strategies during reading. Visualizing and retelling supports students after reading.

Adaptability/Congruence with the Classroom Curriculum

WRS Instruction follows a prescribed sequence of lesson plans. The teacher decides how to pace a student through the steps of the program.

How effective is it?

The effectiveness of the Wilson Reading System has been documented with students who are dyslexic or who have other reading disabilities. There has not been an independent evaluation of the program with secondary readers.

Rating: Promsing

Dickson, S. & Bursuck, W. (1999). Implementing a model for preventing reading failure: A report from the field. *Learning Disabilities Research & Practice, 14*(4), 191–202.

This report documents the first of a three-year professional development program at two rural elementary schools that included WRS. Upper-grade students with learning disabilities made improvements in reading

skill when teachers received sufficient in-service training.

WRS was selected for inclusion in and favorable discussion by the following scholarly monographs:

Clark, D., & Uhry, J. (1995). The Wilson Reading System. In *Dyslexia: Theory and practice of remedial instruction* (2nd ed.) Baltimore, MD: York Press.

Moats, L.C. (1998) Reading, spelling, and writing disabilities in the middle grades. In B. Wong (Ed.). *Learning about learning disabilities.* Orlando, FL: Academic Press.

Where has it been implemented successfully?

Contact the Wilson Reading System for demonstration sites.

STRATEGIES

Fifteen strategies for supporting the instruction of struggling secondary readers are described in this section:

- Background Knowledge Strategies
- Collaborative Strategic Reading (CSR)
- Dictated Stories /Language Experience Approach (LEA)
- Fluency Strategies
- Generative Vocabulary Strategies
- Independent Reading Strategies
- K-W-L-Plus Strategy
- Literature-Based Reading Instruction
- Reader Response Strategies
- Reading Guide Strategy
- Reading Workshop Approach
- Reciprocal Reading Strategy
- Text Mapping Strategies
- Vocabulary and Concept Mapping Strategies
- Word Analysis Strategies

Background Knowledge Strategies

Developers	Various researcher have described these strategies, including Advanced Organizers: David Ausubel, 1968; PreP: Judith Langer, 1981; Text Previews: Donald Graves, 1983; and Anticipation Guides: Readence et al., 1998.
Strategy Type	Instructional strategy that becomes a learning strategy
Background	Strategies to help students activate what they know in order to connect it with the content of a comprehension task
Primary Outcomes	Background Knowledge; Making Inferences
Students	All secondary readers
Setting	General education class; Reading classes
Support for Culturally and Linguistically Diverse Readers	Students can be led to contribute their experiences and understandings to the classroom. Teachers have an opportunity to acknowledge and honor what students know.
Instructional Approach	Diagnostic instruction; cooperative learning
Materials	Teacher provided
Cost	None
Effectiveness	Established

What is it? How does it work?

Activating and building background knowledge is a strategic process incorporated into effective prereading. Several strategies have been developed that guide students to activate their prior knowledge through teacher intervention, such as *PReP* (PRe Reading Plan; Langer, 1981), *Advanced Organizers* (Ausubel, 1968), *Anticipation Guides* (Readence, Bean, & Baldwin, 1998), *Text Previews* (Graves, Cook, & LaBerge, 1983).

PReP is a teaching strategy for activating students' knowledge before a reading task. The teacher guides the class in a discussion that begins with students making word associations to key concepts the teacher has identified. Students then reflect on these concepts, reformulating what they brainstormed. The process continues as students compare their knowledge to that of other students, self-assess their level of their prior knowledge, and predict areas of new information. From student responses, the teacher can assess the level of well-formed, partially formed, or ill-formed knowledge structures of the students.

Advanced Organizers and *Text Previews* are paragraphs written by the teacher with a formal structure engaging the students' background knowledge and fostering interest. A first section of these previews builds interest and makes connections to familiar topics. The next section previews or summarizes the text to be read in a short synopsis. A final section provides guiding questions focusing the students' reading. The teacher creates the preview, discusses how the preview relates to students' prior knowledge in a large group, and then directs students to read the text.

Anticipation Guides also follow a prescribed format. After identifying the major concepts in a text, the teacher creates a limited number (usually 3–5) of debatable, experienced-based statements that express these concepts. Before reading, students read the statements and check off those with which they agree. Students then discuss each statement and debate their opinions. Next students read the passage and end with a follow-up discussion of the statements based on their reading.

What professional development is required?

Teachers can read descriptions of the strategies in the original sources (Ausubel, 1968; Langer; 1981; Graves et. al, 1983; Readence et al., 1998) as well as current content-area reading textbooks.

How do background knowledge strategies build reading proficiency?

Strengths: Background Knowledge; Making Inferences

Motivation

Possible outcome: The strategies have specific components for engaging reader interest. These connections may be motivating for continued reading.

Decoding

- *Basic Decoding*
  Not addressed.

- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*
  Possible outcome: Reviewing key vocabulary definitions before reading can build student word knowledge.

- *Background Knowledge*
  Primary outcome: Students are encouraged to generate associations to the major concepts of the text and to clarify why they had these ideas and not others. They evaluate their brainstormed contributions to determine how they were generated.

- *Making Inferences*
  Primary outcome: Students learn to generate mental imagery on the ideas they brainstormed. They predict what the author will state about these concepts, to elaborate on and summarize what they know, and evaluate whether what they know is still relevant.

- *Self-Regulated Comprehending*
  Secondary outcome: Students may gain a metacognitive awareness of what they know.

Transaction with Text

Secondary outcome: Engaging background sets the stage for transaction with text. The teacher will need to guide readers to make connections during reading.

How does it support effective reading instruction?

Materials

Reading texts may be authentic, narrative, or expository and should be at the student's instructional level.

Reading Task

The teacher plans the reading task, which may be authentic and can allow student choice. To enable students to transfer these strategies to other contexts, teachers should provide them with additional modeling and practice.

Instructional Approach

To learn these strategies, students work in large or small cooperative groups. Student responses provide the teacher with diagnostic assessment for the review or preteaching of concepts. Teachers have the opportunity for culturally responsive teaching, through selection of reading materials and task, heterogeneous grouping, and guiding the contribution of culturally based student knowledge.

Student Scaffolds

These strategies model effective activation and assessment of knowledge before reading, with little connection to comprehension during or after reading. Therefore they should be combined with other strategies for monitoring and extending student understanding of the text.

Adaptability/Congruence with the Classroom Curriculum

The process by which teachers engage prior knowledge should be consistent, but the activities students perform can vary. Langer (1981) offers strategy steps as guidelines, then presents ways in which teachers can make adaptations. General education teachers can implement these strategies as needed for assessment and for building prior knowledge.

How effective is it?

The studies on *PreP, Advanced Organizers,* and *Text Previews* were done more than a decade ago, but they documented the effectiveness of these strategies with struggling secondary readers. No research was found on *Anticipation Guides.* These three strategiesit are easily incorporated into strategy repertoires.

Rating: Established

Langer and Nicholich (1981) found *PReP* to be a better predictor of reading comprehension than IQ or standardized reading assessments. For high school students of mixed ethnicity (including Hispanic) in 11 social studies classrooms, Molner (1989) found that although *PReP* did not improve immediate recall, it did improve delayed recall. The effect was independent of reading ability or level of background knowledge. Students with higher levels of background knowledge appeared to benefit most from *PreP,* although students with low knowledge also improved their comprehension. No differences between ethnic groups emerged, implying that the PReP benefited both groups equally. Graves and Prenn (1984) and Graves and colleagues (1983) found *Text Previews* improved comprehension and attitudes among at-risk eighth grade social studies students. Stone (1983) in a meta-analysis of *Advanced Organizer* research found consistent increased learning and comprehension retention.

Ausubel, D. P. (1968). *Educational psychology: A cognitive view.* New York: Holt, Rinehart and Winston.

Graves, M. F., Cooke, C. L., & LaBerge, M. J. (1983). Effects of previewing difficult short stories on low ability junior high school students' comprehension, recall, and attitudes. *Reading Research Quarterly, 18*, 262–276.

Graves, M. F., & Prenn, M. C. (1984). Effects of previewing expository passages on junior high school students' comprehension and attitudes In J. A. Niles & L. A. Harris (Eds.), *Changing perspectives on research in reading/language processing and instruction: Thirty-third Yearbook of the National Reading Conference* (pp. 173–177). Rochester, NY: National Reading Conference.

Langer, J. A. (1984). Examining background knowledge and text comprehension. *Reading Research Quarterly, 19*(4), 468–481.

Langer, J. A., & Nicholich, M. (1981). Prior knowledge and its effects on comprehension. *Journal of Reading Behavior, 13*(4), 375–378.

Langer, J. L. (1981). From theory to practice: A prereading plan. *Journal of Reading, 25*(2), 152–156.

Molner, L. A. (1989, Dec.). *Developing background for expository text: PReP revisited.* Paper presented at the annual meeting of the National Reading Conference, Austin, TX. (ERIC Document Reproduction No. ED 316 843).

Readence, J. E., Bean, T. W., & Baldwin, R. S. (1998). *Content area reading: An integrated approach (*6th ed.*)* Dubuque, IA: Kendall Hunt.

Stone, C. L. (1983). A meta-analysis of advanced organizers studies. *Journal of Experimental Education, 51*(4), 194–199.

Collaborative Strategic Reading (CSR)

Developers	Researchers Janette K. Klingner, Sharon Vaughn, and Jeanne Schumm
Strategy Type	Instructional strategy that becomes a learning strategy
Background	A set of four strategies to aid decoding and comprehending content-area text. It was developed for students with learning disabilities who are in general education classrooms. CSR integrates word identification, reciprocal reading, and cooperative learning.
Primary Outcomes	Basic Decoding, Fluent Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	Struggling secondary readers
Setting	General education class; Reading classes
Support for Culturally and Linguistically Diverse Readers	Success has been reported with second language learners (Klingner & Vaughn, 1999). Heterogeneous grouping allows scaffolding by students who are bilingual or who have greater proficiency in reading skills.
Instructional Approach	Modeling, guided practice, independent practice; cooperative learning
Materials	Content-area text from regular classroom instruction.
Cost	None
Effectiveness	Established

What is it? How does it work?

Collaborative Strategic Reading (CSR) is a set of four strategies struggling readers can use to decode and comprehend as they read content-area text. Researchers Janette K. Klingner, Sharon Vaughn, and Jeanne Schumm developed CSR for struggling upper elementary and middle school readers with learning disabilities by adapting reciprocal reading and cooperative learning strategies. CSR can be used by content-area teachers in inclusion settings as well as by reading teachers.

To implement CSR, students of mixed reading and achievement levels work in small, cooperative groups of 4–5 students. They support each other in applying a sequence of reading strategies as they read orally or silently from a shared selection of text. The four strategies are as follows:

1. *Preview.* Before reading, students brainstorm prior knowledge and predict what will be learned.
2. *Click and Clunk.* Students identify words or word parts that were hard to understand (called "clunks"). A sequence of "fix-up strategies" is used to decode the clunk. These strategies are (a) rereading the sentence for key ideas, (b) looking for context clues in the sentences before and after the sentence being considered, (c) looking for prefixes or suffixes, and (d) breaking the word apart to find smaller words.

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3. *Get the gist.* What is the most important person, place, or thing? What is the most important idea about the person, place, or thing?
4. *Wrap up.* After reading, students construct their own questions to check for understanding of the passage, answer the questions, and summarize what has been learned.

To learn to work in the cooperative group, students are taught the following five roles that correspond to the strategies:

1. *Leader,* who says what to read next and what strategy to apply next.
2. *Clunk expert,* who uses cards to remind the group of the steps.
3. *Gist expert,* who guides the group to articulate the gist and then evaluates it.
4. *Announcer,* who calls upon group members to read or share ideas.
5. *Encourager* who gives praise and encourages and evaluates discussion.

What professional development is required?

Beyond the description of CSR provided in this *Guide*, teachers can refer to Vaughn and Klingner (1999) and Klingner and Vaughn (1999).

How does Collaborative Strategic Reading build reading proficiency?

Primary Outcomes: Basic Decoding, Fluent Decoding, Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Secondary outcome: The peer interaction that occurs as students work in heterogeneous groups can promote interest and persistence in the reading task.

Decoding

- *Basic Decoding*

Primary outcome: Students are taught to apply a decoding strategy when they encounter an undecodable word (called a "clunk") during reading.

- *Fluent Decoding*

Primary outcome: Students practice fluent oral reading in the context of their cooperative groups.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

Primary outcome: Students are taught to apply knowledge of roots, prefixes, and suffixes.

- *Background Knowledge*

Primary outcome: Before reading, students brainstorm prior knowledge and predict what will be learned.

- *Making Inferences*

Primary outcome: After reading a selection of text, students integrate meaning across sentences in order to "get the gist" of what was read. The gist expert must articulate that understanding to the group.

- *Self-Regulated Comprehending*

  Primary outcome: Students are taught to construct their own questions to check for understanding. Each cooperative group role requires a student to check the processes used by group members.

Transaction with Text

Secondary outcome: Students can transact with the text as they negotiate the meaning with peers during questioning and summarizing.

How does it support effective reading instruction?

Materials

CSR is designed to be used in content-area textbooks. Students have also applied it to other expository text such as newspapers and magazines. To teach the strategy, the developers recommend using text that interests students and provides sufficient context for vocabulary terms and comprehension.

Reading Task

Textbook reading is the reading task students need to be able to do in most content-area classrooms. For transfer to occur, the strategy should be practiced in the content-area classroom with regularly assigned classroom text.

Instructional Approach

The teacher models each of the strategies through a think-aloud and provides guided and independent practice. Students apply four reading strategies while working in mixed ability groups. Group interaction strategies must be taught to insure respect for and inclusion of all students. Students are taught specific roles. The roles rotate and students may perform more than one role at a time. The mixed ability grouping allows fluent language speakers to scaffold language learners.

Student Scaffolds

Before reading, students preview to predict what they know about the topic and what they will learn. During oral reading in small groups, they apply strategies of "declunking" to decode unknown words and to state succinctly the most important ideas. After reading, they write out the most important ideas learned in their learning logs.

Adaptability/Congruence with the Classroom Curriculum

CSR is applied in the context of regular classroom instruction. Teachers instruct students in the steps of the strategy, but the reading materials and structure of the cooperative groups are adapted to the teaching context.

How effective is it?

CSR has been well documented in peer-reviewed scholarly publications, primarily in Special Education Journals.

Rating: Established

The following articles describe the procedures for implementing CSR:

Vaughn, S., & Klingner, J. K. (1999). Comprehension through Collaborative Strategic Reading. *Intervention in School and Clinic, 34*(5), 284–92.

Klingner, J. K., & Vaughn, S. (1999). Comprehension, content learning, and English acquisition through Collaborative Strategic Reading. *The Reading Teacher, 52*(7), 738–47.

Klingner, J. K., & Vaughn, S. (1998). Using Collaborative Strategic Reading. *Teaching Exceptional Children, 30*(6), 32–37.

These studies report the effectiveness of CSR implementation:

Bryant, D. P., Vaughn, S., Linan-Thompson, S., Ugel, N. & Hougen, M. (in press). Reading outcomes for students with and without reading disabilities in general education middle school content-area classes. *Learning Disabilities Quarterly.*

Klingner, J. K., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension for students with reading disabilities who use English as a second language. *The Elementary School Journal, 96*(3) 275–293).

This study was of 26 seventh and eighth grade students whose native language was Spanish and whose English reading comprehension was at least two years below grade level. After 27 days of a modified reciprocal strategy instruction (including either cooperative grouping or cross-age tutoring) students made significant gains on a measure of reading comprehension.

Where has it been implemented?

CSR was implemented in 2000 as one part of a summer reading program for struggling secondary readers in Austin, Texas.

Austin Independent School District
1111 West Sixth Street
Austin, TX 78703-5399
Contact Dr. Marty Hougen

Dictated Stories /Language Experience Approach (LEA)

Developers	R. G. Stauffer (1970) set out the most commonly recognized steps; many variations have been reported.
Type of Strategy	Teaching strategy
Background	Students dictate stories, responses, or experiences to a teacher or peer, who writes or word processes the account using the student's words verbatim. Students then practice reading aloud the transcription, possibly to a partner.
Primary Outcomes	Transaction, Motivation, Decoding, Fluency
Students	Struggling elementary, secondary, and second language readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Students have the opportunity to bring to the classroom their interests and experiences from outside of school.
Instructional Approach	Culturally responsive teaching; inquiry; diagnostic teaching
Materials	None
Cost	None
Effectiveness	Well established

What is it? How does it work?

Dictated stories, also called the Language Experience Approach, has been effective in developing the skills of new readers ranging from young children to adults. Students dictate stories, responses, or experiences to a teacher or peer, who writes or word processes the account using the student's words verbatim. Students then practice reading aloud the transcription, possibly to a partner. In reading their own words, students maintain a personal connection to reading while building sight word knowledge and fluency. The dictated stories can be collected into a personal anthology, to be shared with other students or family.

Perez (2000) presented an adaptation of the approach for supporting reading of second language learners in the content-area classroom. The three steps are as follows:

1. *Discussion activities.* The teacher initiates a discussion around the major ideas of a text (usually expository) to be read. The teacher guides the class and the struggling readers in particular to share their experiences and knowledge. The teacher (or a peer) reads a text segment aloud, then stops to ask questions for further discussion.
2. *Recording.* Student discussion is recorded by the teacher or by a designated student. With a tape recorder, it is possible for the discussion of the whole class to be documented without disruption. Later the class discussion, including the words of struggling readers, can be transcribed.
3. *Follow-up activities.* Students review or reflect on the text that was read. Second language learners may draw a sketch of their understanding, which they explain to a group. They may practice reading

aloud portions of the transcription of the discussion.

Other variations of the strategy are possible. It is one of the few that helps students make the connection between spoken print and decoding the written word.

What professional development is required?

Teachers will need to review the strategy and plan for instruction with their students.

How do dictated stories build reading proficiency?

Primary Outcomes: Motivation, Basic Decoding, Fluency, Transaction with Text

Motivation

Primary outcome: Use of this strategy allows for student's "funds of knowledge" (see Moll et al., 1992) to enter the classroom. The reading task can be perceived as interesting and valuable.

Decoding

- *Basic Decoding*

Primary outcome: Student will learn sight words and, with teacher or peer guidance, can be led to see decoding and spelling generalizations when analyzing their own words in print.

- *Fluent Decoding*

Primary outcome: By rereading text that they have constructed, students will experience successful fluent reading fairly quickly.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☐ **Predicting**
☐ **Generating questions**
☐ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☐ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

Possible outcome: Although students may learn components of multisyllabic words that are in their oral vocabularies, their actual vocabulary knowledge will not be expanded by this strategy.

- *Background Knowledge*

Secondary outcome: With appropriate questioning by the teacher, students link new concepts and understandings with what is known, despite lack of full English proficiency.

- *Making Inferences*

Secondary outcome: By reading their own words, students can connect making inferences in using oral language with making inferences in reading print. Teachers likely will need to help struggling readers see that connection.

- *Self-Regulated Comprehending*

Secondary outcome: Students activate their own knowledge prior to reading.

Transaction with Text

Primary outcome: Reading a personally dictated story provides a model of transacting with text. Through discussion that elicits student experiences and knowledge, students make a personal response to the reading task. Readers will need additional support to apply transaction with other text.

How does it support effective reading instruction?

Materials

Reading material includes transcription of the students own words. When applied in a content-area classroom, the strategy includes the reading of expository text at the student's instructional level, prompting the discussion from which the dictated accounts are taken.

Reading Task

Students choose the personal experiences and knowledge they share. The task of reading one's own words is inherently authentic. Dictated stories can be made into books that share, for example, life histories, friendships, and viewpoints. It is an opportunity for the language and experiences of diverse students to be honored in the classroom.

Instructional Approach

The instructional approach will depend on how the strategy is used. Students may work one-on-one with a teacher, in pairs, or in a cooperative group. From the student's oral reading and responses to questions, the teacher can assess for future instruction. The prompt for the dictated stories can be an opportunity for the language and experiences of diverse students to be honored in the classroom.

Student Scaffolds

Scaffolds include prereading discussion, during reading dictation and repeated reading, and postreading reflection.

Adaptability/Congruence with the Classroom Curriculum

Dictated stories/LEA is a versatile strategy, appropriate for use in most content-area classrooms.

How effective is it?

Although first established with young children and adult nonreaders, a few reports have documented the effectiveness of this strategy with struggling secondary readers.

Rating: Well established

Ashton-Warner, S. (1969). *Teacher*. New York: Simon & Schuster. In this classic account, Sylvia Ashton-Warner describes her work with Maori children whom she was able to teach by respecting their interests and culture, Dictated stories was one of her approaches.

Perez, S. A. (2000). Teaching second language learners in the regular classroom. *Reading Improvement, 37 (1)*, 45-8. Perez documents the effectiveness of several adaptations of LEA.

Stauffer, R. G. (1970). T*he language experience approach to the teaching of reading*. New York: Harper & Row. Stauffer set out basic steps for using the approach with new readers.

Fluency Strategies

Developers	Repeated oral readings for fluency has been advocated by S. J. Samuels (1979).
Strategy Type	Instructional strategies that become student strategies
Background	Repeated oral readings of easy text, often modeled by more fluent readers, assists nonfluent readers.
Primary outcome	Fluency
Students	Stuggling secondary readers
Setting	Reading or language arts classroom
Support for Culturally and Linguistically Diverse Readers	Partner readings have been used successfully in cross-age tutoring with native Spanish speakers.
Instructional Approach	Diagnostic instruction with modeling and guided practice. May also use cooperative learning.
Materials	Short, easy to read (independent) reading materials
Cost	None
Effectiveness	Well established

What is it? How does it work?

Strategies used to enhance reading fluency share common qualities. These are as follows:

1. the use of independent level text (text that has few new words for students) or predictable and patterned text (text that has repetitions or patterns as in poetry or song lyrics),
2. modeling by more fluent readers, and
3. repeated readings of the text until greater accuracy and speed are achieved.

The following fluency strategies have been effective with struggling secondary readers:

Repeated Readings

In this strategy advocated by Samuels (1979), readers practice repeated oral readings on the same selection until a criterion has been met for words read per minute (speed) or until a certain number of readings has been accomplished (accuracy). The criterion for exceptionally nonfluent readers is 85 words per minute and a half-dozen repeated readings are often required to meet it. As students develop fluency, a higher criterion of words per minute is established and fewer readings are required.

Paired Reading

In this strategy based on the neurological impress method (Heckelman, 1969), a good reader (often a parent) and a less fluent reader read a book aloud together. The good reader slightly leads or follows, depending on the less fluent reader's needs and desires. A log is kept.

Echo Reading and Choral Reading

The teacher reads the text aloud while students listen and read along silently. Discussion may follow. The teacher and students read the text together. Then choral or antiphonal choral reading is performed.

Another strategy that has proven successful is for the teacher to mark phrase boundaries with highlighters or slashes, thus delineating meaningful chunks or phrases (Schreiber, 1980, 1991; Rasinski, 1990). The readers then practice with the marked text and then reread the same text in its unmarked version. Students can also be taught to mark phrases after initial instruction with teacher-marked text.

Benefits from each of these strategies include increased fluency, higher accuracy in word recognition, and better comprehension.

What professional development is required?

Teachers can learn more about how to implement fluency strategies from professional journals and books.

How do fluency strategies build reading proficiency?

Primary outcome: Fluency

Motivation

Possible outcome: Students can be motivated by their success in appropriate materials and a task at which they are likely to improve.

Decoding

- *Basic Decoding*

Secondary outcome: Basic decoding has been shown to improve through the use of fluency strategies, although the primary purpose of these strategies is to develop fluency.

- *Fluent Decoding*

Primary outcome: The purpose of repeated reading, paired reading, and echo and choral reading is to develop fluency. Practice in these types of oral reading, especially following a more fluent reader, has been shown to improve to improve fluency.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☐ **Predicting**
☐ **Generating questions**
☐ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☐ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

Secondary outcome: Students may gain in skill related to morphology and syntax as a result of developing more fluent reading. Attending to phrase markings and meaningful phrasing helps students develop a better sense of syntax.

- *Background Knowledge*

Not addressed.

- *Making Inferences*

Not addressed.

- *Self-Regulated Comprehending*

Possible outcome: Students who develop more fluent reading may be able to give more attention to creating meaning.

Transaction with Text

Not addressed.

How does it support effective reading instruction?

Materials

Materials for building fluency generally are short passages, narrative or expository, written at a student's independent reading level.

Reading Task

Passages can be chosen by teacher or student.

Instructional Approach

Teachers model for students ways of approaching these strategies, as well as how to monitor and chart progress. Once students can do these tasks, they work individually and in pairs.

Student Scaffolds

Fluency strategies provide support during reading.

Adaptability/Congruence with the Classroom Curriculum

Fluency strategies are highly adaptable. Teachers can decide strategy procedures, materials, and grouping appropriate for their students and classrooms.

How effective is it?

The effectiveness of various fluency strategies is well established through research and practice. They have been elaborated and modified to meet the needs of a variety of students at all ages. Recent research suggests that they can be effective with learning disabled students and ESL students.

Rating: Well established

Heath, S. B., & Mangiola, L. (1991). *Children of promise: Literate activity in linguistically and culturally diverse classrooms.* Washington, DC: National Education Association, Center for the Study of Writing and American Educational Research Association.

Heckelman, R. G. (1969). A neurological impress method of remedial-reading instruction. *Academic Therapy, 4*(4), 277–282.

Rasinski, T. V. (1990). *The effects of cued phrase boundaries in texts.* Bloomington, IN (ERIC Document Reproduction Service No. ED 313 689).

Samuels, S. J. (1979). The method of repeated readings. *The Reading Teacher, 32*(4), 403–408.

Schreiber, P. (1980). On the acquisition of reading fluency. *Journal of Reading Behavior, 12*(3), 177–186.

Schreiber, P. (1991). Understanding prosody's role in reading acquisition. *Theory into Practice, 30*(3), 158–164.

Generative Vocabulary Strategies

Developers	*Possible sentences* was described by Moore and Moore (1986). *Keyword Strategy* was reported *by* Levin, Levin, Glasman, and Nordwall (1992). *VSS* was developed by Martha Rapp Haggard (1982).
Strategy Type	Student learning strategies
Background	Students learn to locate, select, and learn words to add to their vocabulary knowledge.
Strengths	Motivation; Background Knowledge; Self-Regulated Comprehending
Students	All secondary readers
Setting	General education classes; Reading classes
Instructional Approach	Modeling, guided practice, independent practice
Support for Culturally and Linguistically Diverse Readers	Students are encouraged to bring to the classroom words from other cultural contexts. VSS has been effective with second language learners.
Materials	Access to a variety of print resources
Cost	None
Effectiveness	Well established

What is it? How does it work?

These strategies build word awareness and vocabulary knowledge by requiring students to make a personal construction of meaning. Teachers may select the words for instructional purposes or students may select their own words. Three commonly used generative vocabulary strategies are Possible Sentences, described by Moore and Moore (1986), Keyword Strategy, reported by Levin, Levin, Glasman, and Nordwall (1992), and Vocabulary Self-Collection Strategy (VSS), developed and researched by Martha Rapp Haggard (1982). The procedures are described here:

Possible sentences

1. Teachers list and pronounce 6–8 new vocabulary words central to the major concepts to be learned and that are adequately defined by the context within the upcoming text. They also present several related terms from the text that students should already know.
2. Students, individually or in groups, are asked to use at least two of the words to make possible sentences, ones they think may be in the text. It does not matter at this point if their possible sentences are factually or grammatically incorrect.
3. Students read and find the targeted vocabulary to verify or correct their predictions.
4. Students evaluate their possible sentences for accuracy and amend them to reflect the meaning gained from the text.
5. Students generate new sentences using the targeted vocabulary and use the text to defend their choices.

Keyword Strategy

This strategy builds on mnemonic devices and visual images to define new words.

1. Teachers review students on the meanings of new vocabulary words and ask them to create personal visual images to help them remember the meaning.
2. Students create memorable images and discuss them with one another and with teachers.
3. Words and their images are recorded in a vocabulary notebook.

Vocabulary Self-Collection Strategy (VSS)

1. Students reading a common text each select a word they consider important to share with the class.
2. Teacher and students present the words, defining them from context. They may clarify and expand on definitions and a dictionary or thesaurus may be consulted for final clarification. Students also present reasons to support why they believe their word is important for understanding the text.
3. Once all words are explored, a final list is made of those the group considers to be the most important for understanding. Students record these words in vocabulary journals.
4. Follow-up activities ensure that words are learned.

What professional development is required?

From the information provided here, certified teachers can implement these strategies with their students. Others should refer to resources provided in the Bibliography of this *Guide*.

How does it develop reading proficiency?

Primary outcomes: Motivation, Linguistic Knowledge, Background Knowledge, Self-Regulated Comprehending

Motivation

Primary outcome: Because each of these strategies involves students in choosing words and creating ways to learn new words, students invest personal meaning in the process.

Decoding

- *Basic Decoding*

Possible outcome: Students will be able to decode the words they have learned. Pronouncing and segmenting the words can strengthen basic decoding skill.

- *Fluent Decoding*

Possible outcome: Increasing the repertoire of decodable words will benefit fluency.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

Concept mapping can build comprehension in many ways, depending upon how it is used.

- *Linguistic Knowledge*

Primary outcome: Students develop an awareness of words. In studying words and their contexts, students develop semantic as well as syntactic knowledge.

- *Background Knowledge*
  Primary outcome: For each generative strategy students engage their background knowledge to determine word meaning from context. They use that knowledge to create images and possible sentences as they build definitions.

- *Making Inferences*
  Secondary outcome: Students infer word meanings and receive feedback on those inferences.

- *Self-Regulated Comprehending*
  Primary outcome: These strategies teach students to make predictions about word meanings and to check their understanding.

Transaction with Text

Possible outcome: Students may be engaged aesthetically while selecting and learning new words.

How does it support good reading instruction?

Materials

Generative strategies require reading materials from which students are likely to encounter interesting and important words not in their oral vocabulary.

Reading Task

By choosing words for study and generating their own meanings through reading and talking, students consider their own purposes for reading. The strategies support transfer by developing students' skill in using context and by using multiple contexts for word learning.

Instructional Approach

To enable students to use these strategies independently, teachers model and provide guided practice in their use. Instruction can proceed with the whole class or cooperative groups. Students think inductively as they predict, confirm, and elaborate their growing vocabulary knowledge. Culturally responsive teaching can result from student choice and from the integration of student background knowledge and experiences.

Student Scaffolds

Possible sentences and Keyword Strategy are prereading, during reading, and postreading strategies. VSS is a during and postreading strategy.

Adaptability/Congruence with the Classroom Curriculum

Teachers and students may adapt the sequence of steps for each strategy to support varied purposes. For example, words can be identified for study or for discussions. Elements of each strategy can be integrated into in the other strategies—for example, by creating visual images with the *VSS* journal list. These strategies can support the ESL curriculum.

How effective is it?

Published reports support the use of each of these generative strategies with struggling secondary readersin a variety of contexts, including content-area classrooms,ESL classrooms, and inclusion settings. The element of choice and the effect of developing associational meanings through discussion, prediction, context, and further discussion have been identified as the strengths of these strategies. Blachowicz, Fisher, Costa and Pozzi (1993) and Dole, Sloan, and Trathen (1995) found vocabulary self-selection to be effective in helping students learn and retain new words. Students' ability to make connections between the known and the new as well as to elaborate on meaning were enhanced by *Possible sentences* (Stahl & Kapinus, 1991) and the *Keyword strategy* (Levin, Levin, Glasman, & Nordwall, 1992).

***Rating:* Well established**

Blachowicz, C. L. Z., Fisher, P. J. L., Costa, M., & Pozzi, M. (1993). *Researching vocabulary learning in middle school cooperative reading groups: A teacher-researcher collaboration.* Paper presented at the Tenth Great Lakes Regional Reading Conference, Chicago.

Dole, J. A., Sloan, C., & Trathen, W. (1995). Teaching vocabulary within the context of literature. *Journal of Reading, 38*(6), 452–460.

Haggard, M. R. (1982). The vocabulary self-selection strategy: An active approach to word learning. *Journal of Reading, 26*(3), 634–642.

Levin, J. R., Levin, M. E., Glasman, L. D., & Nordwall, M. B. (1992). Mnemonic vocabulary instruction: Additional effectiveness evidence. *Contemporary Educational Psychology, 17*(2), 156–174.

Moore, D. W., & Moore, S. A. (1986). Possible sentences. In E. K. Dishner, T. W. Bean, J. E. Readance, and D. W. Moore (Eds.). *Reading in the content areas: Improving classroom instruction* (2nd ed.). Dubuque, IA: Kendall/Hunt, 174–179.

Stahl, S. A., & Kapinus, B. A. (1991). Possible sentences: Predicting word meanings to teach content area vocabulary. *Reading Teacher, 45*(1)36–43.

Independent Reading Strategies

Developers	L.C. Hunt first described the procedures and purposes for Sustained Silent Reading in 1970.
Type of Strategy	Student strategy
Background	Sustained Silent Reading (SSR) and its variations—Uninterrupted Sustained Silent Reading (USSR) and Drop Everything and Read (DEAR)—provide students with a block of time during the school day, devoted to reading. During SSR time, everyone reads (including the teachers and staff). There are no interruptions, and usually no required assignments or activities related to the reading.
Primary outcomes	Motivation, Transaction with Text
Students	All secondary readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	If appropriate reading materials are provided, the interests of a diverse group of readers can be satisfied.
Instructional Approach	A specified period of time is set aside each day for the express purpose of reading. Students and teachers read self-selected books.
Materials	Selected literature and texts
Cost	Varies with availability and cost of literature and texts
Effectiveness	Established

What is it? How does it work?

Moving students toward independent self-sustained reading is the goal of all reading programs. Several strategies have been developed to assist teachers in meeting this goal with their students. Sustained Silent Reading (SSR) and its variations, Uninterrupted Sustained Silent Reading (USSR) and Drop Everything and Read (DEAR) are some of the strategies designed to help students become independent readers. Each of these strategies provides students with a block of silent reading time during the school day. During SSR time, everyone reads (including the teachers and staff), there are to be no interruptions, and no follow-up activities related to the reading are required.

The goal of all independent reading strategies is to increase students' abilities to sustain reading for longer periods of time by providing students with time to practice silent reading. In addition, because teachers and other adults participate in the required reading time, models of good silent reading behavior are provided. Proponents believe that SSR will help student's value reading more, become more fluent, and improve their vocabularies and comprehension.

Little is needed to implement a program of SSR other than access to a variety of appealing books and the commitment to allocate time for reading.

What professional development is required?

Little professional development is required. Independent reading time requires access to a variety of appealing books and teachers who will engage in reading while their student read. A knowledge of high-quality literature for middle and high school students would be an advantage for any teacher.

How do independent reading strategies build reading proficiency?

Primary outcomes: Motivation, Transaction with Text

The goals of SSR are to provide students with time to practice silent reading, to provide models of good silent reading behavior, and to increase students' abilities to sustain reading for longer periods of time. Proponents believe that SSR will help students value reading more, become more fluent, and improve their vocabularies and comprehension.

Motivation

Primary outcome: Because students self-select their reading materials, motivation is high. Texts match students' interest and ability levels and other than the amount of time devoted to reading, accountability and outcome measures are minimal.

Decoding

- *Basic Decoding*

Not addressed. However, because reading material is self-selected, students tend to select material they are able to decode. As a result, continued practice at independent and instructional reading levels can lead to more accurate decoding.

- *Fluent Decoding*

Secondary outcome: Reading regularly and for sustained periods of time can strengthen automaticity of decoding.

Language Comprehension

Comprehension processes addressed:

☐ **Making associations**
☒ **Predicting**
☐ **Generating questions**
☐ **Generating mental imagery**
☐ **Clarifying**
☐ **Elaborating**
☐ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

Possible outcome: While linguistic knowledge is not directly addressed, knowledge of the forms and functions of texts can increase with the reader's exposure to print.

- *Background Knowledge*

Not addressed.

- *Making Inferences*

Not addressed.

- *Self-Regulated Comprehending*

Possible outcome: Because texts are self-selected, students are not required to complete a reading. As a result, students select another text when comprehension breaks down or ceases to engage. Rather than signaling the failure of independent reading, this occurrence can be an opportunity for the reader to be led to see the metacognitive processes of the decision.

Transaction with Text

Primary outcome: Independent reading is intended to promote reading for pleasure. Since this is the intended outcome, students would be expected to respond aesthetically to their reading, or they would choose another text when they are no longer satisfied with the reading experience.

How does it support effective reading instruction?

Materials

As originally designed there are no restrictions placed on the texts students select. Students select their own materials. In some contexts, schools or teachers ask students to select within a preselected range of texts.

Reading Task

Students choose materials according to their interest, abilities, and purposes for reading. Transfer of interest, value of reading, and skills developed through extensive reading are intended to have transfer to all reading tasks.

Instructional Approach

Beyond setting the purpose for reading, maintaining focus and modeling sustained silent reading, teachers do not provide direct instruction in the reading skills and strategies. The goals of SSR are to provide students with time to practice silent reading, to provide models of good silent reading behavior, and to increase students' abilities to sustain reading for longer periods of time.

Student Scaffolds

Because students self-select material, the level of difficulty of the text should be such that little, if any, scaffolding is necessary. The more engaged students are in reading materials at independent and instructional levels, the more likely they are to support themselves as they read.

Adaptability/Congruence with the Classroom Curriculum

Independent reading strategies require setting purposes, uninterrupted time to read self-selected books, and follow-up time to sustain reading. Many variations are possible, including shared reading, journaling, and other activities. Independent reading can implemented across the curriculum.

How effective is it?

Research on the effectiveness of SSR is extensive but the results are mixed. In some studies, teachers and schools changed basic procedures. Results from studies on special populations (struggling readers and ESL students) indicate some modifications in SSR may prove helpful. These include carefully matching students with materials and implementing shared readings and discussions (Allington, 1975; Pilgreen & Krashen, 1993).

Rating: Established

Allington, R. (1975). Sustained approaches to reading and writing. *Language Arts, 53*(6), 813-815.

Holt, S. B., & O'Tuel, F. S. (1989). The effect of Sustained Silent Reading and Writing on achievement and attitudes of seventh and eighth grade students reading two years below grade level. *Reading Improvement, 26*(4), 290–297.

This study reports significant improvements in reading achievement and attitude among seventh and eighth grade students reading two years below grade level after a 10-week program of SSR.

Hunt, L. C.(1971). Six steps to the individualized reading program (IRP). *Elementary English, 48*(1), 27–32.

Hunt first set out the rationale and steps for SSR.

Nagy, N M., Campenni, C. E., & Shaw, J. N. (2000). A survey of Sustained Silent Reading practices in seventh-grade classrooms. http://readingonline.org

In this survey of 96 seventh grade Pennsylvania teachers, 67% reported that SSR was in use at their schools. Frequent departures from the original SSR design included: lack of teacher modeling, exclusion of low-level readers, and lack of student choice in reading material.

National Institute of Child Health and Human Development (2000). *Report of the National Reading Panel. Teaching Children to Read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* http://www.nichd.nih.gov/publications/nrp/smallbook.htm

The National Reading Panel reported a lack of positive relationship between SSR-type programs and improvements in reading achievement in the studies it reviewed.

Pilgreen, J., & Krashen, S. (1993). Sustained Silent Reading with English as a Second Language high school students: Impact on reading comprehension, reading frequency, and reading enjoyment. *School Library Media Quarterly, Fall,* 21–23.

In this study, high school ESL students indicated positive gains on comprehension tests as well as frequency and enjoyment of reading after a 16-week period of SSR.

K-W-L-Plus Strategy

Developers	Eileen Carr and Donna Ogle (1987)
Strategy Type	Instructional strategy that becomes a learning strategy
Background	Extends Ogle's (1986) K-W-L strategy to secondary readers. The questions What do I know? (K), What do I want to know? (W), and What did I learn? (L) are supported with summarizing and mapping.
Primary outcomes	Making Inferences; Self-Regulated Comprehending
Students	All secondary readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	The strategy helps teachers to elicit knowledge and understandings from culturally and linguistically diverse students. It is recommended for second language learners.
Instructional Approach	Teacher-led, inductive instruction with cooperative grouping
Materials	Teacher-selected expository texts
Cost	None
Effectiveness	Established

What is it? How does it work?

In K-W-L-Plus, students access prior knowledge and interest before reading, monitor understanding during reading, and reflect after reading through listing, mapping, and summarizing what was learned.

Step K—What do I know?

Before students read, the teacher writes a concept (from what will be read) on the board or transparency and poses the "Know" question. As the class brainstorms, the responses are listed on a strategy sheet beginning with a column labeled "K—What we know." Afterward students and teacher categorize this brainstormed list into information they predict will be in the text. The teacher can model the categorization activities or prime students with suggested categories. This process helps students become aware of the content and how it is structured. It also helps the teacher assess students' level of prior knowledge.

Step W—What do I want to learn?

The teacher elicits student questions stemming from their interests and curiosities or from unanswered questions about the concept. These are listed on the strategy sheet under a column labeled "W—What do I want to learn?" Students read sections of the passage individually (broken into manageable segments—one or two paragraphs for weak readers) and check for answers to the questions. As they are reading, additional questions might be added to this column and answered as a group.

Step L1—What did I learn?

Both during and after reading, students write what they learned in a third column

"L—What I learned" and check the questions that were unanswered.

Step L2—Mapping.

Students refer to the K step to categorize what they learned. Students select and relate important information by using the title of the passage as the center of the map and the categories as the major branches with the explanatory concepts detailed under these major branches. Students refer to the map to create exam or study questions.

Step L3—Summarizing.

Students number the concepts on the map based on the order of points they choose to make in their summary. They write summaries using the numbers, adding enough details to explain each concept. The summaries become a useful summative evaluation for the teacher and student as they evaluate their comprehending. After several K-W-L-Plus activities, students are encouraged to use it as an independent learning strategy.

Variations on the theme of K-W-L-Plus

Huffman (1998) combined KWL with the five "W" questions (Who? What? Where? When? and Why?). Mandeville (1994) advocated adding an additional column allowing students to assign relevance and personal value to what is being learned.

What professional development is required?

Certified teachers can implement the strategy from the descriptive overview provided here. Others should refer to resources provided current content reading textbooks. Although strategy is learned in less than half a day, expertise is attained through practice and, ideally, the feedback of colleagues.

How does KWL-Plus develop build proficiency?

Primary outcomes: Background knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Secondary outcome: Carr and Ogle (1987) claim students will choose to use this technique because they convince themselves that they comprehend better. Although no evidence has been published, Ogle (1986) argues that students remember what they have looked for and become more actively involved after using K-W-L.

Decoding

- *Basic Decoding*
  Not addressed.

- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*
  Possible outcome: While linguistic knowledge is not the primary aim of K-W-L-Plus, concept development is a possible result of this strategy. Students become aware of the content and how it is structured.

- *Background Knowledge*

Primary outcome: The activation and building of background knowledge is a primary aim of this teaching strategy. Done as a large group activity, students with weaker knowledge can build their understanding before reading through the K step. Students learn the value of predicting and generating questions before reading. The L steps are directly focused at documenting for students how much they have learned and added to their background knowledge.

- *Making Inferences*

Primary outcome: Incorporating mapping and summarizing in this adaptation of K-W-L-Plus can improve students ability to make associations, clarify understanding, elaborate on what was learned, and evaluate for both the teacher and the student their level of comprehension.

- *Self-Regulated Comprehending*

Primary outcome: The strategy provides a model for activating background knowledge and self-questioning at each stage of the reading process. Students check their understanding with the text and with understanding of others.

Transaction with Text

Secondary outcome: Mandeville (1994) argues that with an additional column labeled "A," students can generate an affective response concerning the relevance and personal value to them of the text they are reading.

How does it support effective reading instruction?

Materials

Carr and Ogle (1987) encourage the use of a "strategy sheet" consisting of three columns representing the prereading(K), perireading (W), and postreading (L) steps. Students read teacher-selected instructional or independent expository text.

Reading Task

As the reading task is decided by the teacher, K-W-L-Plus can accommodate authentic purposes and student choice. Transfer is supported when several teachers in a school use the strategy and provide opportunities for students to apply it independently.

Instructional Approach

The teacher leads the students through inductive thinking processes. During the K step, students categorize the brainstormed concepts to help them infer connections. During the L step, students create a map of the concepts and then summarize what they learned, a process that fosters retention. The instruction can be supported by cooperative groups.

Student Scaffolds

Students access prior knowledge and interest before reading, monitor understanding during reading, and reflect after reading through listing, mapping, and summarizing what was learned. Support scaffolds include the teacher and peers.

Adaptability/Congruence with the Classroom Curriculum

The steps are designed to be followed sequentially, but teachers can make adaptations appropriate for their students. How students use the strategy for study reading will also vary. K-W-L-Plus can be applied across the curriculum with a variety of reading tasks and materials.

How effective is it?

Ogle's original K-W-L strategy is popular and widely accepted, although the research to support its effectiveness has been limited. McLain (1993) found no differences in reading achievement for KWL with third and fifth graders. Stone and Miller (1991) documented growth among struggling college readers when K-W-L served as the basis for a college reading course. Students saw the strategy modeled, practiced the strategy in groups, and applied it independently in a corequisite course. Significant differences were found on pre- and post-comprehension tests, grades in the corequisite courses, short-term retention rates, and interviews of confidence in the use of active reading strategies.

Rating: Established

Carr, E., & Ogle, D. (1987). K-W-L-Plus: A strategy for comprehension and summarization. *Journal of Reading, 30*(7), 626–631.

Bryan, J. (1998). K-W-W-L: Questioning the known. *Reading Teacher, 51*(7), 618–620.

Cantrell, R. J. (1997). K-W-L learning journals: A way to encourage reflection. *Journal of Adolescent and Adult Literacy, 40*(5), 392–393.

Huffman, L. E. (1998). Spotlighting specifics by combining focus questions with K-W-L. *Journal of Adolescent & Adult Literacy, 41*(6), 470–472.

Mandeville, T. F. (1994). KWLA: Linking the affective and cognitive domains. *Reading Teacher, 47*(8), 679–680.

Manzone, C. A. (1989). *Six strategies for teaching reading comprehension to learning disabled students.* (ERIC Document Reproduction No. ED 311 667).

McLain, K. V. M. (1993). *Effects of two comprehension monitoring strategies on the metacognitive awareness and reading achievement of third and fifth grade students.* (ERIC Document Reproduction No. ED 364 840).

Ogle, D. M. (1986). K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher, 39*(6), 564–570.

Shelley, A. C., & Others, A. (1997). Revisiting the K-W-L: What we knew; what we wanted to know; what we learned. *Reading Horizons, 37*(3), 233–242.

Stone, N., & Miller, K. (1991). Developmental college reading: Secrets of our success. *Research and Teaching in Developmental Education, 7*(2), 27–42.

Tannenbaum, J. E. (1996). *Practical ideas on alternative assessment for ESL students: ERIC Digest.* (ERIC Document Reproduction No. ED 395 500).

Weissman, K. E. (1996). Using paragraph frames to complete a K-W-L. *Reading Teacher, 50*(3), 271–272.

Literature-Based Reading Instruction

Developers	Various researchers and educators have promoted this approach.
Strategy Type	Classroom instruction model
Background	Literacy instruction based on trade books appropriate for the students' age and interests.
Primary outcomes	Motivation, Background Knowledge, Transaction with Text
Students	All secondary readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Teachers or students can select literature reflective of students' culture and language, allowing for diverse backgrounds to be engaged, voiced, and respected.
Instructional Approach	Cooperative learning; Inquiry
Materials	Selected high-quality children's, young adult, or adult literature
Cost	Varies with availability and costs of literature
Effectiveness	Promising

What is it? How does it work?

In the last few decades, many secondary reading programs have been developed around the use of authentic published literature, a practice traditionally limited to the English classroom. Although the application of literature-based reading instruction varies by teacher, the common element is children's, young adult, or adult literature as the basis for literacy instruction. These trade book (as opposed to textbook) programs may be organized in a variety of ways to scaffold struggling readers. Three popular models are *core literature, text sets,* and *thematic units* (Gunning, 1999).

Core Literature Programs

A core literature program includes a variety of trade books selected by the district or teacher to be used for intensive reading. The books, read by the whole class or by groups, give students a common ground for building conversations about texts and a reference point for comparing and contrasting books and stories. Trade book selection should consider student interest, but without some student choice in the process, this advantage can be lost. To scaffold struggling readers, teachers using a core book strategy present the books in a variety of ways (for example, read-alouds, audiotaped versions, and partner reading).

Text Sets

Text sets are simply trade books that are all related in some way. For example, the teacher or students may choose to read several books by the same author, several books about one point in history, or one genre, such as diaries or memoirs. As with a set of core books, if students are reading book within the same set, even if they are not all reading the exact same book, they have a common ground for discussion. Text sets allow for the teacher to differentiate the instruction, so that struggling readers have books at their independent reading levels.

Thematic Units

A unit that organizes instruction around a central theme can help struggling readers to build background knowledge and to connect their understanding to such other contexts as classes, work, and home. Thematic units may draw from a text set or a core set of trade books and be orchestrated with other classroom teachers.

What professional development is required?

Teachers should begin by learning the range of literature and genres that apply to their content area. General professional development in literature-based reading instruction is offered at most universities and through private consultants. Important readings include Atwell (1998) and Keene and Zimmermann (1997).

How does literature-based reading build reading proficiency?

Primary outcomes: Motivation, Background Knowledge, Transaction with Text

Motivation

Primary outcome: Materials in the literature-based classroom are selected for student interest. Support for making personal connections with high-interest materials can strengthen student motivation to persist in reading.

Decoding

- *Basic Decoding*

  Not addressed. Teachers may wish to monitor progress by asking students to read aloud. Decoding may improve as a result of sustained reading practice in appropriately selected materials.

- *Fluent Decoding*

  Secondary outcome: Fluency may improve as a result of sustained reading practice.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

  Not addressed.

- *Background Knowledge*

  Primary outcome: Thematic organizations of texts help students to form hierarchical conceptual understandings. The discussions and compositions in response to literature can strengthen their ability to build knowledge through reading.

- *Making Inferences*

  Secondary outcome: As students discuss and write about text, they can integrate background knowledge with information in the text to make inferences and form questions to clarify and summarize ideas drawn from text.

- *Self-Regulated Comprehension*

  Secondary outcome: Students make predictions and then monitor their reading to validate or discard those predictions. Students continually check what they understand with the understandings of others.

Transaction with Text

Primary outcome: Readers are led to take an aesthetic stance toward the text.

How does it support effective reading instruction?

Materials

Teachers or students select from a set of texts that teachers or administrators have determined to be quality literature, appropriate for student interest and ability. The materials (usually trade books) can be either narrative or expository.

Reading Task

Often the goal of the reading task is to have conversations about literature and to validate each reader's unique responses to it. Students may self-select the literature or the teacher may make assignments. Thematic units and authentic materials help students to transfer their reading skills to other settings.

Instructional Approach

The literature-based classroom utilizes such cooperative learning strategies as literature circles. Students respond inductively to the readings. The selection of materials and strategies appropriate to students enables culturally responsive teaching.

Student Scaffolds

Teachers provide the purpose for reading prior to reading the text. During reading, students monitor their success in achieving the stated purpose. After reading, through discussion and composition, students clarify their shared and unique understandings of texts.

Adaptability/Congruence with the Classroom Curriculum

There are many published reports of adaptations of this approach. The literature-based classroom organization can be adapted across the curriculum, orchestrated with other instructional models.

How effective is it?

Numerous published reports share the successes of literature-based instruction in secondary classrooms, some with struggling secondary readers. There has been limited research.

Rating: Promising

Applebee, A. N. (1993). *Literature in the secondary school: Studies of curriculum and instruction in the United States.* Urbana, IL: National Council of Teachers of English.

This book reports on four related studies of literature instruction in middle and high schools. The studies included case studies of schools as well as analyses of the literature used in classrooms. Findings suggest that literature-based programs can be successful with a wide range of students, although many factors, including class size and outdated skills of teachers, characterize less successful programs. Applebee calls for a more detailed framework for teachers in the area of literature-based instruction.

Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning.* 2nd ed. Portsmouth, NH: Boyton/Cook Heinemann.

Bertrand, J. E., & Stice, C. F. (1995) (Eds.). *Empowering Children at Risk of School Failure: A Better Way.* Norwood, MA: Christopher-Gordon Publishers, Inc.

Teachers share how they have used literature-based reading programs in diverse elementary and secondary settings, including inner city and rural, and with diverse populations, including second language learners and students with learning disabilities.

Gunning, T.G. (1999). *Creating literacy instruction for all children* (3rd ed.). Allyn & Bacon.

Keene, E.O. & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a Reader's Workshop.* Portsmouth, NH: Heinemann.

Langer, J. A. (1994). *A Response-Based Approach to Reading Literature. Report Series 6.7.* (ERIC Document Reproduction Service ED366 946).

In a six-year study, Langer found that "even the most at-risk" secondary readers were able to engage in thoughtful discussion about literature and develop deep understandings.

McGowan, M. J., & Powell, J. H. (1996). An annotated bibliography of resources for literature-based instruction. *Social Education, 60*(4) 231-32

Reader Response Strategies

Developers	The work of Louise Rosenblatt (1938/1983, 1978) helped to establish this approach. James Squire (1963) set out a framework for content analysis of reader responses.
Strategy Type	Instructional strategy that becomes a student strategy
Background	These unique strategies focus on developing transaction with text. Students are guided in connecting their own emotions and experiences during reading.
Primary outcomes	Motivation, Background Knowledge, Transaction with Text
Students	All secondary readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	These strategies can be uniquely powerful in eliciting student response from multicultural perspectives.
Instructional Approach	Cooperative learning; inquiry; culturally responsive teaching
Materials	Selected high-quality children's, young adult, or adult literature
Cost	Varies with availability and costs of literature
Effectiveness	Established

What is it? How does it work?

Unique responses to literature have been examined and considered since the 1920s, culminating in the work of Louise Rosenblatt. In 1938 and again in 1978, Rosenblatt drew attention to the unique and legitimate contributions of the reader to text understanding. These contributions can be elicited through instructional strategies in the context of a literature-based classroom. Four strategies that have been successful with struggling secondary readers are described here.

The *Point, Counterpoint response strategy* (Rogers, 1987, 1990, 1991) encourages multiple interpretations of complex stories. It consists of three stages.

1. Students read the story, jotting down responses that come to mind.
2. In small groups or with the whole class, students discuss their responses with others and elaborate on them, comparing their response with responses of others.
3. Students revise their original responses, adding a rationale or an explanation.

The *Response Heuristic* (Bleich, 1978) asks students to provide three written responses to a text.

1. In "text perception," the reader composes a brief summary statement about the content.
2. The reader reacts to the text.
3. The reader provides "associations with the text," which are personal connections that are elaborated upon with their own prior knowledge and beliefs.

The *Sketch to Stretch* activity (Harste, Short, & Burke, 1988) asks students to generate sketches reflective of their interpretations of a text. Students share these sketches in small groups while peers offer interpretations. Once group members have suggested an interpretation, the artist presents his or her interpretation. This activity continues until everyone has presented his or her work.

Readers' theater focuses on oral reading and interpretation as well as composition and comprehension (Post, 1974; Young & Vardell, 1993). Readers select favorite literature from which they develop and perform scripts. To prepare, students may practice reading lines as a group. Teachers can allow the use of simple props and encourage a theatrical performance. Or students can be asked to let the words alone convey the meaning. Following the performance, students and audience discuss the performance. Revision may follow.

What professional development is required?

Teachers should pursue a study of this approach to text and look for additional strategies to support their instruction.

How do reader response strategies build reading proficiency?

Primary outcomes: Motivation, Making Inferences, Transaction with Text

Motivation

Primary outcome: Reader response strategies focus on the engagement of personal knowledge, emotion, and experience. Reading that is meaningful and relevant can motivate students to persist in reading tasks and to gain a sense of themselves as readers.

Decoding

- *Basic Decoding*
  Not addressed.
- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*
  Not addressed.

- *Background Knowledge*
  Secondary outcome: Readers are led to connect what they know to the understanding of the text.

- *Making Inferences*
  Primary outcome: The strategies both model and elicit the construction of meaning across the elements of text.

- *Self-Regulated Comprehension.*
  Primary outcome: As readers compare their responses to others, they evaluate their understanding. They may reconsider and revise their responses.

Transaction with Text

Primary outcome: In discussing texts, students come to understand that one text can hold multiple meanings, depending upon background knowledge and experience. Response strategies provide models for affective engagement.

How does it support effective reading instruction?

Materials

Almost any text can be used, depending on the reading task.

Reading Task

The reading task can be structured by the teacher or by the students. Student selection of authentic materials and the connections made to student lives will foster strategy transfer.

Instructional Approach

Teachers may move beyond the examples provided here. These strategies emphasize each student's unique response to literature. Appropriate materials and strategies enable culturally responsive teaching.

Student Scaffolds

Student response is solicited before, during, and after reading.

Adaptability/Congruence with the Classroom Curriculum

Reader response can be applied to student reading tasks in almost any classroom context. Teachers should adapt the strategies for their own instructional goals and students.

How effective is it?

Rosenblatt's work on reader response theory and Squire's work on applying it are reported below.

Rating: Established

Rosenblatt, L. (1938/1983). *Literature as exploration* (4th ed.). NY: Modern Language Association.

Rosenblatt, L. (1978). *The reader, the text, the poem.* Carbondale, IL: Southern Illinois University Press.

In this work, Rosenblatt set out her transactional theory of reader response to literary works. She explicated two stances that the reader can adopt: the aesthetic and the efferent.

Squire, J. (1963). *The response of adolescents to four short stories.* Urbana, IL: National Council of Teachers of English.

Squire, J. (1994). Research in reader response, naturally interdisciplinary. In R. Ruddell, M. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 637–652). Newark, DE: International Reading Association.

The following published reports explicate selected reader response strategies.

Bleich, D. (1978). *Subjective criticism.* Baltimore: Johns Hopkins University Press. Bleich explicates the Response Heuristic strategy.

Harste, J., Short, C., & Burke, C. (1988). *Creating classrooms for authors.* Portsmouth, NH: Heinemann.

Rogers, T. (1990-91). A point counterpoint response strategy for complex short stories. *The Journal of Reading, 34*(4) . 278–282. Rogers explicates the point counterpoint response strategy.

The research on reader response has been primarily qualitative. The following reports represent the work with secondary readers:

Ollmann, H. E. (1996). Creating higher level thinking with reading response. *Journal of Adolescent & Adult Literacy, 39*(7), 576–81. Ollmann documented how seventh graders using reading response strategies improved the quality of thinking in responding to young adult novels.

Post, R. M. (1974). Readers theater as a method of teaching literature. *English Journal, 64*(6), 69–72.

Rogers, T. (1987). Exploring a socio-cognitive perspective the interpretive processes of junior high school students. *English Quarterly 20*(3), 218–230.

In this study, Rogers found that certain characteristics of a question-and-answer discussion format may inhibit students' interpretive responses. A response-centered discussion format may be more effective with struggling readers.

Rogers, T. (1991). Students as literary critics: The interpretive experiences, beliefs, and processes of ninth-grade students. *Journal of Reading Behavior, 23*(4), 391–423.

Rogers, T., Green, J., & Nussbaum, N. (1990). Asking questions about questions. In S. Hynds and D. Rubin (Eds.), *Perspectives on talk and learning*. Urbana, IL: National Council of Teachers of English.

Young, T. A., & Vardell, S. (1993). Weaving readers theater and nonfiction into the curriculum. *Reading Teacher, 46*(5), 396–406.

Young and Vardell described how readers' theater could assist students in exploring a variety of subject areas.

Reading Guide Strategy

Developers	R. Earle described guides for reading in mathematics in 1969. In 1970, H. Herber described three-level guides for general content reading.
Strategy Type	Teaching strategy
Overview	Students respond to a written guide of teacher-created prompts as they read assigned text. The prompts elicit literal, interpretive, and applied levels of comprehension.
Primary outcomes	Background Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All secondary readers
Setting	General education and Reading classes
Support for Culturally and Linguistically Diverse Readers	Teachers construct guides appropriate for the reading task and their students' background knowledge. As a result, effective guides will meet the needs of a diverse group of readers.
Instructional Approach	Explicit strategy instruction through modeling, guided practice, and support from peers. Responsibility for learning is gradually shifted from teacher to student.
Materials	Teacher-selected, content-appropriate expository or narrative text, including textbooks and trade books.
Cost	Price and availability of reading materials will vary.
Effectiveness	Established

What is it? How does it work?

Reading guides are adjunct aids that guide readers through texts. These guides are designed to promote such comprehension abilities as recognizing ideas literally stated in texts, synthesizing ideas that must be inferred from text, applying ideas from texts in other contexts, recognizing major and supporting ideas in texts and determining its structure. Although there are many ways to guide readers through texts, the most often described in the professional literature are three-level guides, question-answer-response guides (QARs), pattern guides, concept guides, and selective reading guides or reading road maps.

Reading guides are teacher-created. Teachers develop guides based on the instructional purposes for reading as well as the needs and knowledge their students bring to the text. A guide helps students to focus on critical information both within and beyond the text. Regardless of the type of guide, all will include statements and questions that help students establish a purpose for reading and then assist students as they monitor their reading toward the achievement of that purpose.

Reading guides initially require the teacher to model and guide students through texts. Teachers continue guidance on subsequent reading guides by overseeing small groups or pairs of students. Finally students complete guides independently.

What professional development is required?

Teachers who have had some college preparation in the area of literacy development can implement this strategy after studying related sources shown by asterisks in the Bibliography section beginning on page 136.

How do reading guides build reading proficiency?

Primary outcomes: Background Knowledge, Making Inferences, Self-Regulated Comprehending.

Reading guides assist students in establishing a clear purpose for reading and using their background knowledge prior to reading. As a result, they are able to construct meaning from text and make applications beyond the text.

Motivation

Possible outcome: The support provided to students during reading, through questions and guided peer interaction, enables them to persist in the reading task.

Decoding

- *Basic Decoding*

Not addressed.

- *Fluent Decoding*

Possible outcome: Although not addressed directly, fluency may improve as a result of sustained, purposeful reading practice.

Language Comprehension

Comprehension processes addressed:

☒ Making associations
☐ Predicting
☐ Generating questions
☒ Generating mental imagery
☒ Clarifying
☒ Elaborating
☒ Summarizing
☐ Rehearsing
☒ Evaluating

- *Linguistic knowledge*

Possible outcome: Students can acquire linguistic knowledge if the reading guide focuses attention to it. For example, questions may direct students to word meaning or text structure.

- *Background knowledge*

Primary outcome: The primary purpose of guides is to activate and build readers' background knowledge such that they are more successful at constructing meaning from a variety of texts.

- *Making Inferences*

Primary outcome: Guides can be designed to focus on ideas contained within a text that must be inferred. Because the student initially works with the whole class and then in small groups, a variety of inferences are drawn based on what experiences the readers bring to the text.

- *Self-Regulated Comprehending*

Primary outcome: Guides are designed to assist students in monitoring their comprehension of texts. Students use these guides as a way to establish a purpose for reading and then evaluate information in the text to determine if it meets their purpose for reading.

Through this primary focus on purpose, students vary their reading strategies (for example, rereading for clarification, skimming texts, mentally summarizing ideas found in texts) thus regulating their comprehension. In addition, teachers model expertise in comprehending texts at multiple levels.

Transaction with Text

Secondary outcome: The Reading Guide questions can help students to engage personal experiences and reactions as they construct meaning during reading. The degree of transaction will depend upon the quality of the questions asked.

How does it support effective reading instruction?

Materials

The teacher selects content-appropriate expository or narrative text, including textbooks and trade books.

Reading Task

Due to the many variations of reading guides and subsequent tasks linked to the guides, teachers can offer authentic, purposeful reading experiences to their students. Teachers may choose to create questions or statements that guide students to think through and beyond text to real-life application. Transfer is also fostered through a variety of questions and tasks and through a gradual release of control of the task of comprehending from the teacher to the students.

Instructional Approach

Reading guides provide for a gradual release of responsibility from teacher to student. They are introduced to students though teacher modeling. Students use the guides to practice reading for a variety of purposes, such as reading to determine major and supporting ideas, or to determine text structure. Students work in small groups or pairs and eventually independently. As they gain competence in constructing meaning from a variety of texts, the teacher reduces feedback and instruction. Students move toward internalizing thinking with, through, and beyond texts until the reading guides are no longer needed.

Student Scaffolds

While reading guides may contain prereading and postreading questions, they are intended to be during-reading guides. The questions or statements guide and support students as they read. The teacher scaffolds students by modeling and guiding them through their use of the guides and monitors their successes and corrects content as well as process misconceptions. As students gain expertise, they provide support for one another.

Adaptability/Congruence with the Classroom Curriculum

Although Reading Guides are based on asking questions to elicit literal, interpretive, and applied levels of comprehension, teachers can be liberal in making adaptations. Guides can be applied across the curriculum to a variety of reading tasks and materials.

How effective is it?

Research into the success of reading guides has been conducted in mathematics, social studies, and science classrooms where teachers used reading guides as an adjunct to their content-area instruction. Results indicate significant improvements in developing general reading comprehension and in gaining specific content knowledge (Berget, 1977;

Riley, 1979; Maxon, 1979; Estes, 1973). Horton & Lovitt (1989) studied the effectiveness of reading guides with regular, remedial, and learning disabled students in science and social studies classes at the middle and high school levels. In all cases (types of students, subject areas, and levels) these researchers documented significant gains among students who used teacher-created reading guides over self-study. Despite little recent research on reading guides, applications are widely described in the professional literature, especially when orchestrated with other strategies.

***Rating:* Established**

Berget, E. (1977). The use of organizational pattern guides, structured overviews, and visual summaries in guiding social studies reading. In H. L. Herber & R. T. Vacca (Eds.), *Research in reading in the content areas. The third report.* Syracuse, NY: Syracuse University, Reading and Language Arts Center.

Earle, R.A. (1969). Developing and using study guides. In H. L. Herber and P. L. Sanders (Eds.), *Research in reading in the content areas: First year report.* Syracuse, NY: Reading and Language Arts Center, Syracuse University.

Estes, T. H. (1973). Guiding reading in social studies. In H. L. Herber and R .F. Barron (Eds.), *Research in reading in the content areas: Second year report.* Syracuse, NY: Reading and Language Arts Center, Syracuse University.

Herber, H. L. (1970). *Teaching reading in content areas.* Englewood Cliffs, NJ: Prentice-Hall.

Horton, S. V., & Lovitt, T. C. (1989). Using study guides with three classifications of secondary students. *The Journal of Special Education, 22*(4), 447–462.

Maxon, G. A. (1979). An investigation of the relative effect between questions and declarative statements as guides to reading comprehension for seventh grade students. In H. L. Herber and J. D. Riley (Eds.), *Research in reading in the content areas: Fourth report.* Syracuse, NY: Reading and Language Arts Center, Syracuse University.

Riley, J. D. (1979). The effect of reading guides upon students' literal, interpretive, and applied level comprehension of word problems. In H. L. Herber and J. D. Riley (Eds.), *Research in Reading in the Content Areas: Fourth Report.* Syracuse, NY: Reading and Language Arts Center, Syracuse University.

Reading Workshop Approach

Developers	Nancie Atwell (1987, 1998); S. McMahom & Taffy Raphael (1997)
Strategy Type	Teaching strategies
Background	Reading Workshop was introduced by Nancie Atwell as she described the reading and writing that occurred in her middle school classroom (Atwell, 1987). Her stories told how language abilities of all students grew when they were provided opportunities to think about, talk about, and write about self-selected texts.
Primary outcomes	Transaction with Text; Motivation; Making Inferences; Self-Regulated Comprehending
Students	All secondary readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	The teacher can provide culturally relevant reading materials and guide discussions through appropriate questioning.
Instructional Approach	Definitions vary, but all programs include some student choice of reading material and time for students to read and respond to what they have read, usually through small group discussion.
Materials	Selected literature
Cost	Varies with availability and cost of literature
Effectiveness	Established

What is it? How does it work?

Using a constructivist approach to learning, Atwell created a classroom where talk about books resembled the talk that occurred at her own dining room table. In this middle school English language arts classroom, all students were invited to read and discuss their responses to texts (Atwell, 1998).

At the heart of Atwell's reading workshop were three tenets. First, students were provided *time* to read. Second, students gained *ownership* over texts by selecting what they read. Finally, students *responded* to the texts they read in a variety of ways. Students were required to engage in reading primarily narrative texts and were not allowed to disturb others. Atwell insisted that her students make up the required reading time if absent. During Atwell's and others' reading workshops, "book talk" was constant and occurred in multiple ways.

In this Reading Workshop approach, the teacher served as an expert guide to reading and writing. Teachers read and wrote alongside their students, thus modeling literary discussions and responses to reading.

In recent years, the number of professional books devoted to students' talk about books has grown (Roser, Strecker & Martinez, 2000). Response to books has also grown and changed. Students talk in literature circles, book clubs, and literature discussion groups. When students participate in literature circles, students read independently and "think collaboratively" (Smith, 1990).. The primary goal of these circles is to encourage students to become critical thinkers. Book clubs differ slightly in that a small group of three to five students meet to discuss one particular book. During their conversations they actively clarify confusing parts of the text, make connections to other texts or personal experiences, and discuss the author's craft and intent (McMahom & Raphael, 1997). Literature discussion groups rely on open-ended discussions in small self-selected groups. Teachers assist in guiding students toward insights or interpretations particularly suited to the text (Eeds and Peterson, 1991). The approach helps students develop their identities as readers and writers.

What professional development is required?

Certified, experienced teachers who are comfortable with a variety of student-centered instructional strategies can implement Reading Workshop. Teachers will need about 3–6 days of independent preparation time prior to implementation.

How does Reading Workshop build reading proficiency?

Primary outcome: Transaction with Text, Motivation, Background knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Primary outcome: Students have a voice in selecting the texts for reading. Texts match students' interest and ability levels whenever possible. Students read and write about topics of their own choice and are encouraged to pursue their own interests. Peer collaboration and sharing establishes a motivating social environment.

Decoding

- *Basic Decoding*

  Not addressed.

- *Fluent Decoding*

  Secondary outcome: Fluency may improve as the result of substantial time spent reading.

Language Comprehension

Comprehension processes addressed:

☒ Making associations
☒ Predicting
☒ Generating questions
☒ Generating mental imagery
☒ Clarifying
☒ Elaborating
☒ Summarizing
☒ Rehearsing
☒ Evaluating

- *Linguistic Knowledge*

  Possible outcome: Knowledge of the forms and functions of language increase as students encounter substantial amounts of text.

- *Background Knowledge*

  Secondary outcome: The reading workshop approach supports students' use of background knowledge. As students discuss texts, logical connections are made to their own life experiences.

- *Making Inferences*

  Primary outcome: As students discuss their responses to texts, they use inferencing skills to clarify and summarize ideas drawn from text.

- *Self-Regulated Comprehending*

  Primary outcome: While explicit instruction in self-monitoring is not directly linked to this approach, students must be prepared to discuss texts with their peers and teacher. As a result, questions from these discussions will shape each student's ability to more closely monitor his or her comprehension.

Transaction with Text

Primary outcome: Through discussion with peers and teachers about common readings, students come to understand how different readers bring their own perspectives to text.

How does it support effective reading instruction?

Materials

Through the use of materials and the forums for response, teachers have the opportunity for culturally responsive teaching.

Reading Task

Student self-select from whole works of literature. Authentic reading tasks and the orchestration of multiple strategies foster transfer.

Instructional Approach

The instructional approach varies depending upon the stage of the workshop. Conferences allow for formative diagnostic assessment and instructional decision making. Minilessons provide modeling, guided practice, and independent practice of reading strategies. The approach to cooperative learning is unique in that the teacher contributes as a participant, by sharing reading and writing with students.

Student Scaffolds

Students select readings and predict content. During reading, they are led to transact with the text and during postreading, they discuss and reflect on what has been read.

Adaptability/Congruence with the Classroom Curriculum

Although Reading Workshop follows certain principles, the specific strategies are selected and orchestrated by the teacher. This approach aligns with curriculum that supports student response to reading and writing.

How effective is it?

Reading Workshop has been used effectively with many populations of struggling secondary readers. However, Wollman-Bonilla (1994) found that struggling readers focused predominantly on text comprehension and therefore were reluctant to participate in book conversations. In contrast, Goatly, Brock, and Raphael (1995) found that special education students successfully engaged in such conversations in reading workshop settings. For second language learners, book conversations fostered growth in language and in text comprehension (Samway & Whang, 1995; Smith, 1990). However, successful book conversations in any of the aforementioned settings required quality books, agreed-upon goals, opportunity for each participant to contribute and a conversational setting (Roser, Strecker, & Martinez, 2000). The following scholarly publications document Reading Workshop effectiveness primarily through qualitative reports and research.

Rating: **Established**

Atwell, N. (1987). *In the middle: Writing, reading, and learning with adolescents.* Portsmouth, NH: Boyton/Cook Heinemann.

In this first book, Atwell describes her middle school language arts classroom where all students are invited to talk about books.

Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning* (2nd ed.). Portsmouth, NH: Boyton/Cook Heinemann.

Eeds, M., & and Peterson, R. (1991). Teacher as curator: Learning to talk about books. *The Reading Teacher, 45*(2), 118–126.

Goatly, V. J., Brock, C., & Raphael, T. E. (1995). Diverse learners participating in regular education book clubs. *Reading Research Quarterly, 30* (3), 352–380.

McMahom, S., & Raphael, T. (Eds.). (1997). *The book club connection*. New York: Teachers College Press.

Roser, N., Strecker, S., & Martinez, M. (2000). Literature circles, book clubs, and literature discussion groups. In K. D. Wood and T. S. Dickinson (Eds.). (2000). *Promoting Literacy in Grades 4–9* (pp. 294–305). Boston: Allyn and Bacon.

Samway, K. D., & Whang, G. (Eds.), (1995). *Literature study circles in a multicultural classroom*. York, ME: Stenhouse.

Smith, K. (1990). Entertaining a text: A reciprocal process. In K. G. Short and K. M. Pierce (Eds.), *Talking about books: Creating literate communities* (pp. 17–31). Portsmouth, NH: Heinemann.

Wollman-Bonilla, J. E. (1994). Why don't they "just speak"? Attempting literature discussion with more and less able readers. *Research in the Teaching of English, 28*(3), 231–258.

A group of more able sixth grade readers constructed collaborative and open literature discussion, whereas a group of less able readers did not.

Reciprocal Reading Strategy

Developers	Developed in the mid-1980s by researchers Ann-Marie Palincsar and Ann Brown (1984). ReQuest was reported by A. Manzo in 1969.
Type of Strategy	Instructional strategies that become learning strategies
Overview	Students use a set of four comprehension strategies on a common text, in pairs or small groups. In a related approach, ReQuest, the teacher leads the whole class in reciprocal questioning.
Primary outcomes	Making Inferences; Self-Regulated Comprehending
Students	All secondary readers, including those who are second language learners.
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	Provides linguistically diverse students with peer social support in the use of oral language
Instructional Approach	Modeling, guided practice, independent practice; Cooperative learning
Materials	Teacher-selected expository text
Cost	None
Effectiveness	Well established

What is it? How does it work?

Reciprocal Reading, also called reciprocal teaching, is a set of four strategies taught to struggling readers, primarily to develop their comprehension monitoring abilities. Through a knowledgeable teacher's explicit instruction, students are taught four strategies: (a) questioning, (b) summarizing, (c) clarifying, and (d) predicting. In pairs or small groups, participants sharing a common text take turns assuming the roles of teacher and student. A student in the role of "teacher" reads aloud a segment of a passage as group members follow along silently. The group members then pose questions that focus on main ideas. The "teacher" answers and summarizes the content. The group discusses and clarifies remaining difficulties in understanding and then makes a prediction about future content. Next a second student takes on the role of teacher for a subsequent segment of text.

Reciprocal Reading was developed in the mid-1980s by researchers Ann-Marie Palincsar and Ann Brown. A related whole class strategy is ReQuest (Manzo, 1969) or reciprocal questioning, in which the teacher leads the whole class in silently reading together a segment of text. Students then question the teacher about the content. After a subsequent segment of text is read, the teacher questions the students. As the questioning process continues, students learn to imitate the teacher's questioning behavior.

Studies demonstrating the success of reciprocal reading with secondary students have used about 20 days for the intervention. Assessments in the form of observations, quizzes, and standardized tests were used to document student learning.

What professional development is required?

Certified teachers who have taken a course in reading can implement the strategy from the descriptive overview provided here. Others should refer to resources provided in the Appendix of this *Guide*. Although teachers may make adaptations, research studies demonstrating the success of Reciprocal Reading have implemented direct instruction and practice of the four-strategy sequence.

How does Reciprocal Reading build reading proficiency?

Primary outcomes: Making Inferences; Self-Regulated Comprehending

Motivation

Secondary outcome: Students practice reciprocal reading in a motivating social setting of peers. The reciprocal reading structure supports student persistence in the reading task. It is designed to be used with materials selected by the teacher, rather than by the students.

Decodin

- *Basic Decoding*

Possible outcome: Closely monitored reading provides the opportunity for self-correction and quick feedback on misunderstandings that may be due to miscues.

- *Fluent Decoding*

Possible outcome: Fluency may improve as a result of sustained reading practice.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☐ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☒ **Summarizing**
☐ **Rehearsing**
☒ **Evaluating**

- *Linguistic Knowledge*

Possible outcome: Specific linguistic knowledge may be learned during questioning and clarifying.

- *Background Knowledge*

Possible outcome: In making predictions about the content of the text, students activate their background knowledge. That knowledge is supported and strengthened during the strategy practice as a result of clarifying and elaborating.

- *Making Inferences*

In summarizing, students must paraphrase and interpret the meaning of the text. They are required to generate or be called upon to answer, inferential level questions.

- *Self-Regulated Comprehending*

Primary outcome: During direct instruction of strategies, the teacher models expertise in self-regulated comprehension. In summarizing and clarifying, students check their understanding with their peers. They may predict task demands (such as test questions).

Transaction with Text

Secondary outcome: Students can transact with the text as they negotiate the meaning with peers during questioning and summarizing.

How does it support good reading instruction?

Materials

The teacher selects expository text that is appropriate for the students' instructional level of reading.

Reading Task

Authenticity and transfer are not specifically addressed. The reading task is related to school and is authentic in the sense that the reading is shared among students. Students are told to identify the demands of a reading task (for example, to take a test or to prepare a report) and to practice the strategies with the task in mind.

Instructional Approach

Through a gradual release of the responsibility model of direct instruction, students are taught a cycle of strategies: predicting, questioning, summarizing, and clarifying. As students become increasingly independent in their use of the strategies, the teacher reduces the feedback and instruction. Students work in small groups, alternately assuming structured roles. The teacher moves from group to group as a participant. Students move toward internalizing the questioning strategies.

Student Scaffolds

The teacher scaffolds students in learning the cycle of strategies by modeling, cueing, prompting, questioning, and remodeling. Once learned, the cycle of strategies scaffolds students at each juncture of the reading process. By working with peers, the task of determining meaning from text is made more manageable and students are more likely to experience success.

Adaptability/Congruence with the Classroom Curriculum

The steps are designed to be followed sequentially, but teachers can make adaptations appropriate for their students. It can be applied across the curriculum with a variety of reading tasks and materials.

How effective is it?

Reciprocal Reading has been extensively documented by both quantitative and qualitative studies, in peer-reviewed scholarly publications, from the mid-1980s through today. Both independent and developer evaluation has been successful with middle school and high school struggling readers, including second language learners, at multiple sites.

Rating: Well established

Reciprocal reading was developed and validated in the mid-1980s by Palincsar and Brown (1984) with seventh graders who were poor comprehenders despite basic decoding skills. The students' improvements in summarizing, questioning, and comprehension transferred to the regular classroom. Rosenshine and Meister (1994) documented the positive gains (median effect size = .88) for reciprocal reading on experimenter-designed tests of expository reading, but limited gains were documented on standardized tests (median effect size = .32). Alfassi (1998) presented a possible reason for limited gains on standardized tests: expository text places different demands on readers than the mostly narrative passages on standardized reading tests. Alfassi (1998) also reported the effectiveness of reciprocal reading with suburban high school students who were at least two years below grade level in comprehension. After 22 days of reciprocal reading, students scored significantly higher than did students in traditional reading skills instruction, whose scores remained virtually unchanged. Manzo and Manzo (1997) provide an explanation of the strategy and examples of its use in classrooms.

Alfassi, M. (1998). Reading for meaning: the efficacy of reciprocal teaching in fostering reading comprehension in high school students in remedial reading classes. *American Educational Research Journal, 35*(2), 309–332.

Klingner, J. J., & Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities who use English as a Second Language. *The Elementary Journal, 96*(3), 275–293.

Manzo, A. & Manzo, U. (1997). *Content area reading: Interactive teaching for active learning.* Upper Saddle River, NJ: Merrill.

Manzo, A.(1969). The ReQuest procedure. *Journal of Reading, 13*(2), 123-26, 163.

Palincsar, A., & Brown, A. (1984). Reciprocal teaching of comprehension fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(2), 117–175.

Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*(4), 479–530.

Text Mapping Strategies

Developers	Reading researchers who reported the value of text mapping are Thomas Anderson, Bonnie Armbruster, Richard Barron, Isabel Beck, and Richard Hanf
Strategy Type	Instructional strategy that becomes a learning strategy
Background	Strategies for helping students identify important concepts and conceptual relationships in text.
Primary outcomes	Linguistic Knowledge, Making Inferences, Self-Regulated Comprehending
Students	All secondary readers
Setting	General education class; Reading classes
Instructional Approach	Modeling, guided practice, independent practice
Support for Culturally and Linguistically Diverse Readers	Teachers should use mapping in the context of a full literacy program that addresses the needs of CLD readers.
Materials	Teacher-selected expository text
Cost	None
Effectiveness	Well established

What is it? How does it work?

Text maps depict important concepts across a selection of text and show how they connect structurally. Text mapping can be used to develop comprehension before, during, and after reading. As a teaching strategy, students use a map developed by the teacher. As a learning strategy, students develop their own maps. In text mapping, the major concepts of a passage attach to major branches in a diagram to which minor branches are added for details. Branches can be labeled to represent the rhetorical structure. It also has been called Graphic Organizers/Structured Overview (Barron, 1980), Idea Mapping (Armbruster & Anderson, 1982) for expository text, and *Story Maps* (Beck & McKeown, 1981) for narrative text.

As a teaching strategy, text mapping has three stages:

I. Preparation: This first stage is considered the most important by the developers.

Step 1. Select the words for the important concepts from a text.

Step 2. Arrange the words into a map that shows how the words are connected.

Step 3. Add to the map words students have previously learned.

Step 4. Evaluate the map by sharing it with a novice teacher to see if the relationships make sense.

II. Presentation: The teacher uses the map for 5–10 minutes as a preteaching tool to introduce the concepts and their interrelationships. Students are encouraged to add concepts and question the relationships. Intermittently, the teacher poses questions to check for understanding.

III. Follow-up: As students read, they are encouraged to see how new information fits into the map.

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As a student strategy, text mapping has two stages:

I. Before reading: For the strategy to be effective, students must be taught to generate their own map of concepts from a text.

II. During and After Reading: Students confirm and add to the map, creating a spatial representation of the concepts in the text. They label the branches to show the relationships between concepts (concept and example, concept and definition, concept and properties, temporal, cause and effect, conditional, and comparison). Students can be taught to review the map prior to a test.

Computer outlining and mapping programs can help students learn and use the strategy.

What professional development is required?

Certified teachers can implement the strategy from the information provided here. Others should refer to resources listed in the Appendix of this *Guide*.

How does text mapping build reading proficiency?

Primary outcomes: Linguistic knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Possible outcome: Some students will be motivated by being able to create their own tool for comprehending. Some will also be motivated by the visual presentation.

Decoding

- *Basic Decoding*
  Not addressed.
- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☒ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☐ **Elaborating**
☒ **Summarizing**
☒ **Rehearsing**
☒ **Evaluating**

Concept mapping can build comprehension in many ways, depending upon how it is used.

- *Linguistic Knowledge*
  Primary outcome: It can be developed by depicting word meanings and relationships among words.

- *Background Knowledge*
  Possible outcome: It is activated during mapping when students make associations and predictions about the text and apply them to confirm their map during reading.

- *Making Inferences*
  Primary outcome: Students learn to infer text structure when it is not explicit.

- *Self-Regulated Comprehending*
  Primary outcome: Mapping requires students to make predictions, self-question, and clarify understanding before, during, and after reading. The map can help them to generate mental imagery. Bean and colleagues (1986) found that mapping combined with summarizing strengthened student recall.

Transaction with Text

Not addressed.

How does it support good reading instruction?

Materials

Mapping can be used with expository or narrative text that is at the students' instructional level, though qualitative research (Bellows, 1994) suggests it is not effective with material that is too easy or too hard.

Reading Task

The teacher determines the reading task when mapping is used as an instructional strategy. The student determines the task when using mapping as a tool for learning. The strategy can be applied to any piece of text. For students to transfer the use of the strategy to other contexts, they must be taught to construct their own map.

Instructional Approach

Mapping is taught through modeling, guided practice, and independent practice and through sharing maps in cooperative groups. Maps can serve as a diagnostic tool for student comprehension.

Student Scaffolds

Mapping can be used by the teacher to engage background knowledge before reading, to monitor comprehension during reading, and to elaborate and evaluate new knowledge after reading. Mapping has been found to be even more effective when students are taught to generate their own maps before reading, to add to or change their maps as they read, and to restructure their maps and rehearse them in preparation for a test particularly when they transfer the strategy to the reading of their classroom materials. When mapping was combined with summarizing, Bean et al. (1986) found that students improved recall.

Adaptability/Congruence with the Classroom Curriculum

Teachers can adapt text mapping to their instructional objectives and to the needs and interests of their students. Text mapping can be applied across the curriculum with a variety of reading tasks and materials. It can be implemented in various formats, such as with computer mapping programs.

How effective is it?

The effectiveness of text mapping has been documented extensively in the research literature, beginning in the 1980s. Text mapping works well with other strategies.

Rating: **Well established**

The following research summaries describe its the value for improving comprehension among older readers.

Al-Kunified, A., & Wandersee, J. H. (1990). One hundred references related to concept mapping. *Journal of Research in Science Teaching, 27*(10), 1069–1075.Anderson, T. H., & Armbruster, B. B. (1984). Studying. In P. D. Pearson (Eds.) *Handbook of Reading Research* (pp. 657–680). New York, NY: Longman.

Barron, R.F. (1980). *A systematic research procedure, organizers, and overviews: a historical perspective.* Paper presented at the Annual Meeting of the National Reading Conference. (ERIC Document Reproduction No. ED 198 508).

Students learned more from constructing their own graphic postorganizer than they did when it was provided to them.

The value of text mapping with narrative text was established by:

Beck, I., & McKeown, M. G. (1981). Developing questions that promote comprehension: The story map. *Language Arts, 58*(8), 913-918.

These reports established the value of text mapping with expository text:

Baker, S. K., et al. 1995). *Vocabulary acquisition: Synthesis of the research. Technical Report No. 13.* (ERIC Document Reproduction No. ED 386 860)

Darch, C. B., Carnine, D. W., & Kameenui, E. J. (1986). The role of graphic organizers and social structure in content area instruction. *Journal of Reading Behavior, 18*(4), 275-295.

Slater, W. H., Graves, M. E., & Piche, G. L. (1985). Effect of structural organizers on ninth grade students comprehension and recall of four patterns of expository text. *Reading Research Quarterly, 20*(2), 189-202.

An outline grid helped ninth graders improve recall of expository text; a structural organizer helped them improve comprehension.

Idol, L. (1987a). *A critical thinking map to improve content area comprehension of poor readers. Technical Report No. 402.* (ERIC Document Reproduction No. ED 282 192)

The following studies show the added positive effects of students generating their own maps for documenting their understanding of text structure:

Anderson-Inman, L., Redekopp, R., & Adams, V. (1992). Electronic studying: Using computer-based outlining programs as study tools. *Reading and Writing Quarterly: Overcoming Learning Difficulties, 8*(4), 337-358.

Armbruster, B. B., & Anderson, T. H. (1980). *The effect of mapping on the free recall of expository text. Technical Report No. 160.* (ERIC Document Reproduction No. ED 182 735).

Bean, T. W., Singer, H., Sorter, J., & Frazee, C. (1986). The effect of metacognitive instruction in outlining and graphic organizer construction on students' comprehension in a tenth-grade world History class. *Journal of Reading Behavior, 18*(2), 153-169.

Draheim, M. E. (1986). *Directed reading-thinking activity, conceptual mapping, and underlining: Their effects on expository text recall in a writing task.* (ERIC Document Reproduction No. ED 285 137)

Herl, H. E., O'Neil, H.F.Jr., Chung, G.K.W.K.,& SchacterJ.(1999). Reliability and validity of a computer-based knowledge mapping system to measure content understanding.*Computers in Human Behavior, 15*(3-4), 315-33.

Tompkins, R. S. (1991). *The use of a spatial learning strategy to enhance reading comprehension of secondary subject area text* (ERIC Document Reproduction No. ED 337 752)

Vallecorsa, A. L., & deBettencourt, L. U. (1997). Using a mapping procedure to teach reading and writing skills to middle grade students with learning disabilities. *Education and Treatment of Children, 20*(2), 173–188.

The following studies have demonstrated the effectiveness for secondary students with learning disabilities:

Bellows, B. P. (1994). *Does knowing about text structures help disabled, adolescent readers? An exploratory study of adolescents' awareness and use of global coherence.* Paper presented at the annual meeting of the National Reading Conference, San Diego. (ERIC Document Reproduction No. ED380 755)

Manzone, C. A. (1989). *Six strategies for teaching reading comprehension to learning disabled students.* (ERIC Document Reproduction No. ED 311 667)

Sorrell, A. L. (1990). Three reading comprehension strategies: TELLS, Story Mapping, and QARs. *Academic Therapy, 25*(3), 359–368.

Vocabulary and Concept Mapping Strategies

Developers	Dale Johnson and P. David Pearson (1978) introduced semantic mapping and semantic feature analysis. Robert M. Schwartz and Taffy E. Raphael (1985) introduced concept of definition maps.
Strategy Type	Instructional strategy that becomes a learning strategy
Background	Students explore new vocabulary and concepts, building upon what they know to see relationships through graphic depictions.
Primary outcomes	Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending.
Students	All secondary readers
Setting and Scope	General education class; Reading classes
Support for Culturally and Linguistically Diverse Readers	The strategies build on student contributions of their knowledge and experiences. Baumann & Kameenui (1991) report that these strategies have been effective with ESL students.
Instructional Approach	Modeling, guided practice, and independent practice; inductive reasoning before, during, and after reading.
Materials	Strategies work with all materials.
Cost	None
Effectiveness	Well established

What is it? How does it work?

Several mapping strategies were introduced during the 1970s and 1980s to help secondary students acquire vocabulary and concept knowledge. These strategies were an alternative to the ineffective practice of testing students on word definitions. Through a graphic depiction of ideas, these strategies build on what students know to help them see relationships with newly introduced vocabulary. Students develop related rather than isolated word knowledge and develop skill in differentiating concepts as well as defining words. Each can be used before, during, and after reading.

Semantic mapping

1. Place the target concept at the center of a diagram.
2. Elicit related key words and concepts from students and place them radiating out from the central concept, grouping them into related categories.
3. Introduce new words and related concepts attached to those known by students.

Semantic feature analysis

1. Select a category of related terms.
2. List terms in a column.
3. List features (characteristics) to be explored in rows above the terms.
4. Indicate feature possession with + or -, or scale 1–3.
5. New terms and features may be added during and after reading.
6. Terms and features are explored through discussion.

Concept of definition (word) mapping

1. Identify a target concept.

2. Guide students to identify relevant (essential) characteristics and contrast these with irrelevant (non-essential) characteristics.
3. Generate examples to illustrate concept.
4. Attach concept to a larger category.
5. Consider related but different concepts within this category.

These strategies have been reported to improve word and concept knowledge as well as comprehension across grade levels, in a variety of content areas and with a variety of learners, including struggling ESL, bilingual, and learning disabled readers.

What professional development is required?

General education teachers can implement most of these strategies from reading about them in professional resources, such as this *Guide*.

How does vocabulary and concept mapping build reading proficiency?

Primary outcomes: Linguistic Knowledge, Background Knowledge, Making Inferences, Self-Regulated Comprehending

Motivation

Secondary outcome: In contributing their own background knowledge and experiences to the mapping, students can develop interest in learning words and in the reading task.

Decoding

- *Basic Decoding*
  Not addressed.
- *Fluent Decoding*
  Not addressed.

Language Comprehension

Comprehension processes addressed:

☒ **Making associations**
☒ **Predicting**
☐ **Generating questions**
☒ **Generating mental imagery**
☒ **Clarifying**
☒ **Elaborating**
☐ **Summarizing**
☐ **Rehearsing**
☐ **Evaluating**

- *Linguistic knowledge*
  Primary outcome: Teachers guide students in identifying and mapping semantic and syntactic elements of words.
- *Background knowledge*
  Primary outcome: Students contribute their background knowledge in generating examples of words and concepts.
- *Making Inferences*
  Primary outcome: Teachers guide students in inferring the meanings of words and relationships among concepts and in documenting them graphically.
- *Self-Regulated Comprehending*
  Primary outcome: Students acquire processes for making associations, predicting meaning, and clarifying and elaborating their understanding.

Transaction with Text

Secondary outcome: Students interact with one another and teachers as they bring relevant background knowledge and experiences to bear on the meanings of words and concepts in upcoming reading task.

How does it support effective reading instruction?

Materials

Almost any reading material may be used with mapping strategies for vocabulary and concept development. The only requirement is that teachers find conceptually related words within the texts for instruction and learning.

Reading Task

The teacher usually determines which words are studied. Teaching relationships among words and concepts, as well as making connections with student knowledge, promotes transfer of learning to other contexts.

Instructional Approach

Instruction with each of these strategies proceeds from teacher modeling and control to eliciting students' input of relevant background knowledge, to students' application of the strategies. Students often must predict word meanings and characteristics of concepts during the mapping process. By relying on relevant background knowledge, each student's fund of knowledge can be acknowledged and added to the group understanding of words and concepts.

Student Scaffolds

Mapping strategies are often prereading, during reading, and postreading although the emphasis may shift depending on the particular strategy. While semantic mapping emphasizes prereading engagement, the concept of definition/word mapping may proceed through prereading, during reading, and postreading, and semantic feature analysis is often done during and postreading.

Adaptability/Congruence with the Classroom Curriculum

Teachers easily adapt vocabulary mapping, although adaptation can affect the success found in research studies. The strategies fit well across the content-area curriculum and encourage student involvement in the construction of meaning.

How effective is it?

Semantic mapping, concept of definition (word) mapping, and semantic feature analysis have been analyzed in a variety of contexts over time.

Rating: Well established

The strategies were first described in the following sources:

Johnson, D. D., & Pearson, P. D. (1978). *Teaching reading vocabulary.* New York: Holt, Rinehart & Winston.

Schwartz, R. M., & Raphael, T. E. (1985). Concept of definition: A key to improving students' vocabulary. *The Reading Teacher, 39(2),* 198–205.

While initial findings about some of these strategies were inconclusive, research in the last two decades has demonstrated their effectiveness in improving word and concept knowledge as well as comprehension with a variety of grade levels (from elementary through college and adult levels), in a variety of content areas, and with a variety of learners (including ESL, bilingual, slow, and learning disabled readers). For a general review of the research, refer to the following publications:

Baumann, J., & Kameenui, E. (1991). Research on vocabulary instruction: Ode to Voltaire. In J. Flood, J. M. Jensen, D. Lapp, & J. R. Squire (Eds.), *Handbook of research on teaching the English language arts* (pp. 604–632). New York: Macmillan.

Pittelman, S. D., Heimlich, J. E., Berglund, R. L., & French, M. P. (1991). *Semantic feature analysis: Classroom applications.* Newark, DE: International Reading Association.

This book sets out the theoretical base for the strategy, reviews the research, and describes applications in elementary and secondary classrooms.

The work of Bos and Anders documented the effectiveness of these strategies with learning disabled adolescents:

Bos, C. S., & Anders, P. L. (1990). Effects of interactive vocabulary instruction on the vocabulary learning and reading comprehension of junior-high learning disabled students. *Learning Disability Quarterly, 13*(1), 31–42.

In a study of 61 learning disabled junior high school students, semantic mapping and semantic feature analysis was found to have greater short-term and long-term effectiveness for reading comprehension and vocabulary learning than instruction in definitions.

Bos, C. S., & Anders, P. L. (1992). Using interactive teaching and learning strategies to promote text comprehension and content learning for students with learning disabilities. *International Journal of Disability, Development and Education, 39*(3), 225–238.

Word Analysis Strategies

Developers	Various developers have described these strategies.
Strategy Type	Student learning strategies
Background	This family of strategies gives struggling secondary readers ways to decode unknown multisyllabic words by developing an awareness of word parts.
Primary outcomes	Basic Decoding, Linguistic Knowledge
Students	Struggling secondary readers; struggling second language readers
Setting	General education classes; Reading classes
Support for Culturally and Linguistically Diverse Readers	When word analysis includes comparisons with other languages (for example, cognates) some linguistically diverse readers will be able to make connections and build on what they know.
Instructional Approach	Modeling, guided practice, independent practice
Materials	Texts at students' instructional and independent levels of reading comprehension.
Cost	None
Effectiveness	Established

What is it? How does it work?

Some struggling secondary readers have difficulty in decoding multisyllabic words. This difficulty can seriously impair comprehension, especially in expository text that secondary students are expected to read. When explicitly taught word analysis strategies, they can be successful. These strategies are described in a number of sources. One is by Thomas Gunning (1998).

Syllable Patterns. Student learns to identify and decode the pronounceable word parts within words.

Morphemic Analysis. Students learn to identify the meaningful parts of a word, such as prefixes, suffixes, roots, and compound words.

Contextual Analysis. Students learn to use verbal clues from the sentence or passage. If the context clues also contain unknown words, students will have difficulty using them.

The Word Identification Strategy. In this orchestration of word analysis strategies (Lenz & Hughes, 1990) students learn a mnemonic, DISSECT, to help them decode unknown words during the reading of content-area texts. Its full implementation is taught by the Strategic Instruction Model (SIM), listed in this *Guide* under Programs. The steps follow:

- Discover the context (by examining syntactic and semantic cues).
- Isolate the prefix (by dividing it from the root).
- Separate the suffix (by dividing it from the root).
- Say the stem (by reading what is left of the word).

- Examine the stem (by dividing the letters and applying knowledge of phonics rules).
- Check with someone.
- Try the dictionary.

If decoding the stem at the Examine stage fails, students are taught to apply three rules of phonics. The rules are

Rule 1. If the stem or part of the stem begins with a vowel, divide off the first two letters; if it begins with a consonant, divide off the first three letters;

Rule 2. If you can't make sense of the stem after using Rule 1, take off the first letter of the stem and use the rule again; and

Rule 3. Check the hints for pronunciation when two different vowels are together (these are provided to students). The strategy was found to work best when the word being read was in the student's listening vocabulary (Bryant, Vaughn, Linan-Thompson, Ugel, Hamff, & Hougen, in press).

What professional development is required?

Most of the word analysis strategies can be implemented by certified teachers who study them or who have the support of a faculty study group.

How do word analysis strategies build reading proficiency?

Primary outcomes: Basic Decoding, Linguistic Knowledge

Motivation

Not addressed.

Decoding

- *Basic Decoding*

Primary outcome: Through word analysis, students learn to apply specific strategies when encountering unknown words in print.

- *Fluent Decoding*

Secondary outcome: Fluency is promoted by more accurate decoding.

Language Comprehension

Comprehension processes addressed:

☒ Making associations
☒ Predicting
☐ Generating questions
☐ Generating mental imagery
☒ Clarifying
☐ Elaborating
☐ Summarizing
☒ Rehearsing
☒ Evaluating

- *Linguistic Knowledge*

Primary outcome: Through word study, students learn spelling patterns for prefixes, suffixes, and roots.

- *Background Knowledge*

Not addressed.

- *Making Inferences*

Not addressed.

- *Self-Regulated Comprehending*

Secondary outcome: Students gain metacognitive awareness of what they are unable to decode and learn to apply corrective strategies.

Transaction with Text

Not addressed.

How does it support effective reading instruction?

Materials

Word analysis strategies should be introduced to students using text at their independent level of comprehension. They should practice the strategy in text that is at their instructional level.

Reading Task

To foster transfer, students should practice word analysis strategies in varied reading contexts and with authentic materials.

Instructional Approach

Many of the syllable patterns and context clues can be taught through modeling, guided practice, and independent practice. Morphemic analysis is taught inductively, building on what students know.

Student Scaffolds

These strategies support students during reading, rather than before or after.

Adaptability/Congruence with the Classroom Curriculum

The strategies can be adapted to suit the needs of students and the instructional context. Word analysis strategies traditionally have been taught by reading teachers. However, general education teachers can use them to support their struggling readers in the context of regular instruction.

How effective is it?

Most of the research on the use of decoding strategies with secondary students has been with students classified as learning disabled.

Rating: **Established**

Bryant, D. P., Vaughn, S., Linan-Thompson, S., Ugel, N., & Hougen, M. (in press). Reading outcomes for students with and without reading disabilities in general education middle school content-area classes. *Learning Disabilities Quarterly.*

Gunning, Thomas G. (1998). *Assessing and correcting reading and writing difficulties.* Boston: Allyn and Bacon.

Gunning provides a description of effective assessments and strategies for all levels of struggling readers.

Lenz, B. K., & Hughes, C. A. (1990). A word identification strategy for adolescents with learning disabilities. *Journal of Learning Disabilities, 23*(3), 149–163.

Henry, M. (1993). Morphological structure: Latin and Greek roots and affixes as upper grade code strategies. *Reading and Writing: An Interdisciplinary Journal, 5*(2), 227–41

DEFINITIONS OF TERMS

The following definitions are arranged by the five questions used to organize the programs and strtegies in this guide.

What is it? How does it work?

struggling readers: students experiencing difficulties reading materials required for academic success.

elementary readers: students through grade 5.

secondary readers: students from grades 6 through 12.

culturally and linguistically diverse (CLD) readers: students whose culture, dialect, or native language is not that of the larger society.

programs: packages of multiple components—such as materials, strategies, and protocols—prepared by an entity, often commercial, for improving reading proficiency.

campus programs: programs that require an administrative commitment at the district, campus, or department level for implementation across classrooms (note: comprehensive school reform programs are beyond the scope of the *Guide*).

classroom programs: programs designed to be implemented by teachers at the classroom level.

strategies: consistent plans, consciously adapted and monitored for improving performance in learning.

teacher strategies: strategies designed to be implemented by teachers for developing student reading ability. They may be delivered to the whole class, to small groups, or to the individual student.

student strategies: internal procedures used by students in the process of reading.

assessment: the act or process of gathering information about students in order to better understand their strengths and weaknesses.

formative: informal assessment of students during learning so that instruction can be adapted appropriately.

summative: formal or informal assessment to determine whether students met the objectives of a unit of instruction.

diagnostic: formal or informal assessment of the areas of an individual student's reading strengths and weaknesses.

What professional development is required?

prerequisite expertise: what someone needs to know and be able to do in order to implement the program or strategy with struggling secondary readers.

certified teacher: a teacher who has completed professional development courses in education and holds a state-issued teaching certificate.

reading teacher: a certified teacher who teaches reading as a separate subject and who has at least one undergraduate course in reading.

reading specialist: a certified teacher whose has completed a prescribed sequence of graduate course work in reading.

formal training time: professional development sponsored by the developer or publisher of the program or strategy.

informal or independent training time: the personal preparation time needed in order to learn how to the program or strategy.

support materials: materials for both teachers and students, including teacher manuals, research articles, student readings, assessments, and activities in varied formats, including print and electronic.

additional learning opportunities: workshops, mentoring, and materials support teachers as they implement the program or strategy, after initial training.

local adaptation: the degree to which a program or strategy can be modified by the classroom teacher.

additional learning opportunities: additional materials, expertise, and workshops.

teacher training model: a major approach to training teachers to implement a program or strategy, such as expert-led workshop or constructivist coaching.

How does it develop reading proficiency?

affective: the reader's emotions, feelings, and sentiments that are centered around the reading task, oneself as a reader, and the meaning gained from reading.

transaction: connecting the author's message to one's own emotions, feelings, and experiences (that is, the stance one takes toward the text). Two stances are "efferent" (information seeking) and "aesthetic" (making personal responses).

motivation: the intention of the reader to begin to read and to persist in the reading task. The reading behavior may be perceived as under one's control (intrinsic motivation) or as controlled by external factors (extrinsic motivation).

cognitive: the mental processes through which the reader obtains knowledge or conceptual understanding—for example, perceiving, judging, abstracting, reasoning, imagining, remembering, and anticipating.

basic decoding: the ability to recognize spoken words based on their printed representations. In English this requires recognizing both the regular ("kernel") and irregular ("colonel") relationships between written and spoken words.

fluent decoding: a level of speed and accuracy of word recognition required in order to comprehend connected text at one's instructional level.

language comprehension: the ability to construct meaning from spoken language.

linguistic knowledge: knowledge of the language system: its semantics, including phonology (sound structure), morphology and vocabulary (word-level meaning), its syntax (grammar structure), and the discourse of connected sentences.

background knowledge: knowledge of how environments operate that affects what is comprehended as well as how much is comprehended. It is general world knowledge as well as domain-specific knowledge (for example, "baseball") that is both declarative ("knowing that") and procedural ("knowing how").

inferencing: comprehension beyond the word level, requiring the comprehender to activate what is known and to use it in integrating meaning across sentences, drawing conclusions about causes, relationships, and social meaning.

self-regulated comprehending: metacognitive control over language that allows the comprehender to know if comprehension has failed and also what to do about it, given the purpose for comprehending.

How does it support effective reading instruction?

authentic materials: generally any text not written for the purpose of teaching students how to read or to practice reading.

instructional materials: text that can be decoded with relatively few word identification problems and is challenging but not frustrating to comprehend when provided classroom instruction and support.

independent text: text that is easy for a student to read with few word identification problems and high comprehension.

high interest: text that appeals to most readers. Some materials are written specifically to a low level of textual difficulty.

narrative: a story or event, actual or fictional, expressed orally or in writing.

expository: text that presents information following a pattern of organization—such as time order, cause and effect, problem and solution, comparison, and simple listing.

authentic purpose: the purpose for reading the text is not only for school but for sharing reading with classmates or beyond the classroom.

student choice: student self-selection of topics or readings.

transfer activities: provisions made for transferring the reading to other reading contexts.

direct instruction: teacher-led instruction through explanation or modeling, followed by guided practice and independent practice.

diagnostic instruction: adapting instruction based on formative assessment of a student's strengths and weaknesses during learning.

constructivist learning: inductive, student-centered instruction in which students construct their own understanding of strategies and text through questioning and sharing with others.

cooperative learning: instructional model in which students work in a structured group with differentiated tasks to reach a common goal.

tutorial: one-on-one instruction between tutor and tutee, either of whom may be teacher, other adult, peer, or younger student.

prereading scaffolds: strategies provided to support the reader in setting a purpose for reading, activating background knowledge, and making predictions about the text.

during-reading scaffolds: strategies that prompt active comprehension during reading.

postreading scaffolds: strategies that stimulate questioning and reflecting after reading to extend understanding and improve learning.

How effective is it?

type of documentation: the forms of public description and evaluation of a program or strategy. The highest quality of documentation is of data that areboth qualitative and quantitative, in peer-reviewed publications and conferences at local, state, and national levels. Independent evaluation is critical, especially for a program that is sold or promoted for school adoption. Evaluation only by developers or anecdotal evidence can suggest a promising program—or, signal that the program or strategy has not been so successful when held to a scholarly standard.

recency of documentation: whether the effectiveness of a program or strategy has been documented recently, with the struggling readers of today. The strongest evidence is for success over an extended period of time and recently.

effectiveness with target population: whether programs or strategies have been successful with struggling secondary readers. For example, effectiveness with elementary readers should not be generalized to presume effectiveness with older readers.

extent of implementation: the success of programs and strategies beyond a pilot implementation. The strongest evidence for effectiveness comes from implementations at multiple sites.

Sources Consulted for Definitions

Harris, T. L. & Hodges, R. E. (Eds.). (1995). *The Literacy Dictionary.* Newark, DE: International Reading Association

Southwest Educational Development Laboratory. (2000). *The Reading Coherence Initiative.* http://www.sedl.org/.

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PART III: PROCEDURES FOR COMPILING THE GUIDE

REVIEW OF THE SCHOLARLY LITERATURE

We began the project by reviewing current theory and practice for building reading proficiency at the secondary level. This review included recognized such scholarly secondary sources as:

- National reports
- ERIC Digests
- Handbooks (including the *Handbooks of Reading Research*)
- publications of professional organizations, including the American Educational Research Association (AERA), Association of Supervision and Curriculum Development (ASCD), the International Reading Association (IRA), and Phi Delta Kappa (PDK)
- Current content-area reading textbooks

Primary research studies, both quantitative and qualitative, and meta-analyses in scholarly, peer-reviewed publications and conference presentations were reviewed. These studies were found by searching:

- ERIC and Psychological Abstracts databases
- Recent national conference presentations at National Reading Conference (NRC), IRA, and AERA

To monitor current developments bearing on secondary reading, newly released reports and publications were searched, including:

- publication announcements from publishers and professional organizations
- Web sites that serve secondary teachers of reading
- comments made by secondary teachers in online discussion groups

DEVELOPMENT OF CRITERIA FOR SELECTION OF PROGRAMS AND STRATEGIES

The subcontract team reached a consensus on the criteria for the inclusion of programs and strategies. The criteria for selecting resources were based on the findings of the research overview.

Criteria for Selection

These are the criteria for selection:

1. Developmentally, contextually, and socially appropriate for improving the reading of struggling secondary readers, grades 6-12.

2. Grounded in reading theory and consistent with principles of effective reading

instruction. Programs also had to be consistent with principles of effective professional development of teachers.

3. Documented to be effective based on quantitative or qualitative data reported in scholarly refereed publications. Programs could instead be documented by a formal program evaluation.

Validity of the Selection Criteria

The validity of the selection criteria was established through external review. Two researchers with expertise in culturally and linguistically diverse readers and one experienced high school ESL teacher reviewed the research overview and the *Guide* for accuracy of representation of current research. Different aspects of the overview were submitted to peer review as proposals to national research conferences. The draft of the *Guide* was reviewed by SEDL. The *Guide* was revised according to the feedback provided and placed into final format.

RESOURCE IDENTIFICATION AND DESCRIPTION

An extensive search yielded a list of resources that potentially aligned with the criteria. The search was conducted by members of the subcontract team. The initial search included programs and strategies that have been used at secondary level, grades six through twelve.

From the extensive list of programs and strategies, those that potentially aligned with the criteria were investigated in greater depth. Pertinent reports, published and unpublished, scholarly as well as nonscholarly, were identified from the ERIC and Psychology Abstracts databases. Articles were selected and acquired. Copies of programs and supporting materials were solicited from the developers or publishers of resources under consideration. For most programs, the developers were interviewed by telephone. For some programs, a site visitation or product demonstration was conducted.

After examining the research overview and inspecting other resource guides, the team decided to include a searchable database to allow users to compare resources across categories. The team generated a list of potential fields for classifying and describing the resources and voted on the fields to reach a consensus. The fields were classified under five broad categories: description, professional development, research base, instruction, and effectiveness. Each field was defined.

The subcontract team established interrater reliability for describing resources along the revised categories. Each member described a second resource according to the selection criteria and the revised fields. The number of agreements was divided by the number of total observations. Initial interrater reliability was 92%. Differences in ratings were resolved through discussion.

Using the selection criteria, two members of the team evaluated each resource. The programs and strategies were divided among team members. First, a resource was documented as a database record. Next, the second team member reevaluated the resource and transformed the database record into a narrative entry for the printed *Guide*. A third team member reconciled the two formats for consistency and accuracy. All team members then read each of the database entries and printed guide entries.

Validity of Descriptive Categories and Format

Several groups of practitioners evaluated the resource descriptions and provided feedback on the clarity of the categories and the utility of the draft of the *Guide*.

1. A focus group of seven middle and high school teachers of struggling secondary readers was convened to provide feedback on the usefulness of the selection criteria, descriptive categories, and proposed formats of the *Guide*. The teachers were asked to share the problems they encounter in working with struggling secondary readers. Their discussion, conducted prior to study of the selection criteria and *Guide* formats, was videotaped. The videotape was analyzed to determine whether their reports confirm the findings of the Research Overview. Ongoing review and feedback was solicited from the focus group participants through discussion over an online web board.

2. A focus group of four secondary-level school administrators was convened at Texas Association of School Administrators (TASA). They provided feedback on the content, format, and distribution of the *Guide*.

3. The *Guide* and research overview were presented to a second focus group of nearly 100 secondary reading and general content-area teachers enrolled in graduate courses at Southwest Texas State University and the faculty of the SWTSU College of Education. Feedback was obtained on the content format and distribution of the *Guide*.

Guide Availability

This *Guide* is available from:
Southwest Educational Development
Laboratory (SEDL)
211 East Seventh Street
Austin, Texas 78701-3281

An online, searchable database of resources may be accessed through the Web site at http://www.sedl.org/.

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